EPRC
ECONOMIC POLICY RESEARCH CENTRE

BUDGET REPRIORITISATION IN UGANDA:
KEY ISSUES FOR 2022/2023 AND BEYOND

Corti Paul Lakuma, Linda Nakato, Smartson Ainomugisha, Dablin Mpuuga and Maya Denis Makika

RESEARCH SERIES NO. 157

May 2022

BUDGET REPRIORITISATION IN UGANDA:
KEY ISSUES FOR 2022/2023 AND BEYOND

May 2022

Corti Paul Lakuma, Linda Nakato, Smartson Ainomugisha, Dablin Mpuuga
and Maya Denis Makika

Copyright © Economic Policy Research Centre (EPRC)

The Economic Policy Research Centre (EPRC) is an autonomous not-for-profit organization established in 1993 with a mission to foster sustainable growth and development in Uganda through advancement of research –based knowledge and policy analysis. Since its inception, the EPRC has made significant contributions to national and regional policy formulation and implementation in the Republic of Uganda and throughout East Africa. The Centre has also contributed to national and international development processes through intellectual policy discourse and capacity strengthening for policy analysis, design and management. The EPRC envisions itself as a Centre of excellence that is capable of maintaining a competitive edge in providing national leadership in intellectual economic policy discourse, through timely research-based contribution to policy processes.

Disclaimer: The views expressed in this publication are those of the authors and do not necessarily represent the views of the Economic Policy Research Centre (EPRC) or its management.

Any enquiries can be addressed in writing to the Executive Director on the following address:

Economic Policy Research Centre
Plot 51, Pool Road, Makerere University Campus
P.O. Box 7841, Kampala, Uganda
Tel: +256-414-541023/4
Fax: +256-414-541022
Email: eprc@eprc.or.ug
Web: www.eprc.or.ug

TABLE OF CONTENTS

EXECUTIVE SUMMARY 2
1. INTRODUCTION 4
2 METHODS AND DATA 5
2.1 Methods 5
2.2 Data Sources 6
2.3 Data caveats 6
3. ALLOCATIVE AND TECHNICAL EFFICIENCIES OF SELECT SECTORS - FINDINGS 6
3.1 Agriculture 6
3.2 Health 9
3.3 Education 13
3.4 Trade and Industry 15
3.5 Social development 16
3.6 Infrastructure (Roads and work and energy and mineral development) 17
4 CONCLUSION AND POLICY RECOMMENDATIONS 20
REFERENCES 22
ANNEX 1 A SNAPSHOT OF PAST BUDGET REPRIORITIZATION 24
ANNEX 2 A SNAPSHOT OF BUDGET RE-PRIORITISATION IN AFRICA IN THE CONTEXT OF COVID-19 25
ANNEX 3 TABLES FOR THE AGRICULTURE SECTOR 33

LIST OF FIGURES

Figure A1 Percentage change to capital expenditure in the 2020 supplementary budget 30
Figure A2 2020 Allocation to the ministry of education as percent of GDP, before and after the 2020 supplementary budget 30

LIST OF TABLES

Table 1 Key to Excel Sheets Colour Coding 6
Table 2 Allocative Efficiency of Agriculture Development Budget 7
Table 3 Allocative Efficiency of Health Development Budget 10
Table 4 Allocative Efficiency of Education Development Budget 13
Table 5 Technical Efficiency of Education Development Budget 14
Table 6 Allocative Efficiency of Trade and Industry Development Budget 15
Table 7 Allocative Efficiency of Infrastructure Development Budget 17
Table 8 Allocative Efficiency of Infrastructure Development Budget 18
Table A1 List and scale of rectification budgets adopted in response to COVID-19 27
Table A2 Allocation efficiency of the agricultural sector, % 33
Table A3 Allocative efficiency for the disaggregated agriculture development budget 36
Table A4 Technical Efficiency of the Agriculture Sector 38
Table A5 Potential Duplication and possible Consolidation Options for Agriculture 49
Table A6 Transformative Outputs to Consider 52

EXECUTIVE SUMMARY

Background

Uganda's budget authority has faced increased fiscal pressure caused by a sudden drop in revenues from the economic slowdown and new expenditure pressures associated with COVID-19 impacts. Consequently, the country has responded by reprioritizing the budget towards 7 sectors, i.e., *agriculture, health, education, trade and industry, social development, works and energy*. These sectors respond to the government's objective of increasing household and firm production and productivity, providing jobs, reducing the health impacts of coronavirus, supporting poverty reduction efforts, promoting exports and enhancing economic growth.

Methods and Data

This paper estimates public development budget allocative and technical efficiency for 7 priority sectors that address government policy objectives. Both allocative and technical efficiency are analysed using ratio calculation. However, for some cases, technical efficiency is analysed based on the difference between target and actual outcomes. We calculate the ratios for the 7 sectors based on the votes and outputs. Furthermore, we use a threshold of 80%, which we deem sufficient to determine whether a budget output is inefficient or not. Budget outputs below 80% are considered to be underperforming. Data on allocative efficiency was provided by MoFPED directorate of budget and that on technical efficiency from budget performance reports. The study period considered for this paper runs from 2016/17 to 2020/21.

Findings

While we observe high allocative efficiency in a majority of the proposed reprioritisation sectors, there is much variation in budget funds and their utilisation due to:

i. A missing link between policy objectives and budgets. Notably, there is a mismatch between wage and non-wage or capital expenditure (CAPEX) allocations, implying inadequate human resources are required to implement the policy objectives, consequently leading to poor outcomes despite the funding provided for CAPEX. This was endemic in the agriculture and health sectors.

ii. Duplication of budget outputs reduces flexibility and accountability and increases monitoring costs. This calls for the consolidation of similar budget outputs, but this should be done with consultation from key stakeholders.

iii. There are variations in utilisation of domestic relative to the external development financing with unmet outcomes. This could be a case of stringent donor monitoring requirements and delays in procurement. This calls for strict monitoring of the domestic development financing to ensure results.

iv. Relatedly, health budgets exhibit an over-reliance on external financing. However, donor funds are largely not integrated into government budgets and may challenge any planned re-allocation. Hence, there is a need to open a discussion with the donors on the possibility of re-channelling financing to other key priority sectors/outputs in line with the country's short-term goals.

v. Generally, as observed in the health and education sectors, budgeting is still based on the output/institution-based system rather than service. This makes it complex to pool resources, spend and strategically purchase goods and services. There is a need to build stronger linkages between budget allocations and sector priorities. This can also enable the implementation of strategic purchasing and incentivize accountability for sector performance.

vi. In addition, there is generally an absence of proper transition towards programme-based budgeting (PBB).

For example, numerous budget outputs in the trade, tourism and industry sector do not have performance indicators that weaken the link between strategies, annual plans, sector policies and budgets.

vii. Generally, we recommend that new road construction should be paused in the short term so that the available funds can be rechannelled to other urgent and critical areas.

1. INTRODUCTION

In 2020, the coronavirus (COVID-19) pandemic resulted in both a global health and an economic crisis. As a result, budget authorities faced an increase in fiscal pressure caused by a sudden drop in revenues related to the global and local economic slowdowns and a sharp rise in expenditure stemming from the new health and economic needs. Without precedence at such a large scale, this situation forced the governments to re-organise their budgets to adapt to the rapidly changing context (see Annex 1). The pandemic found many African countries with limited fiscal space and a majority with a pre-existing debt burden. To limit the widening of their fiscal gap and the risk of an uncontrolled increase in debt, many countries resorted to cuts and shifting across budget programmes and lines, often passing a revised budget (see Table A1 in Annex 2).

Uganda has responded by reallocating funds to key sectors like health, extending social assistance programmes, and providing liquidity through credit and credit guarantees to alleviate the pressure on households and businesses. Such reprioritisation aims to spend on sector/programmes supporting the government's objective of enhancing household and firm production and productivity, creating jobs, reducing the health impacts of COVID-19, supporting poverty reduction efforts, promoting exports, and enhancing exports economic growth.

Notwithstanding these efforts, there have been concerns of effectiveness and efficiencies of such budget allocations and utilisation, and in turn, impacting expected outcomes. Potential sources of budget inefficiencies include but are not limited to low absorption capacities, lack of coordination between government agencies and between the government and development partners, inadequate staffing, inadequate investment in capital expenditure, delays in procurement and political interference. Furthermore, the extent to which such allocations are informed by evidence remains scanty. It is, therefore, critical for policymakers to understand how public resources are utilised before deciding whether reprioritisation through budget cuts or increases are needed. Also, understanding sectoral/vote/output spending profiles and efficiency may be helpful for future studies to shed some light on the causes and consequences of budget allocation patterns. Knowing the sources of inefficiency can help public decision-makers to target productivity improvement efforts better. Moreover, there has been a history of mismatch in government priorities reflected in the National Development Plans (NDPs) and actual budget allocations, significantly impacting the delivery of planned outcomes.

Against this background, it is important that the government re-aligns the development budget commitments to NDP 3 with a COVID-19 lens (assumptions have changed from the time of adoption). This paper provides input into this process by critically analysing key allocative and technical efficiency outputs that contribute to the current government priorities, hence providing evidence-based guidance to the development budget re-prioritisation process. Specifically, the paper sought to answer the following policy questions.

a) What are the trends and sources of allocative efficiency? What are the development budget outputs with the best use of inputs (outputs with lower public service cost), changes over time; and the sources of inefficiency (absorption capacity, staffing, procurement, donors)?
b) What are the trends and sources of technical efficiency? What are the development budget outputs with the best outcome and the sources of the poor outcomes?
c) What are those transformative outputs that the government could invest to balance its policy objectives and outcomes? In which inputs, by sector and program, should the budget be prioritised to achieve maximum output and best outcome in the context of resource and capacity constraints presented by COVID-19?

The rest of the paper is structured as follows. Section 2 describes the methods and data employed to answer the above-mentioned policy questions. Data and concepts caveats are also discussed. Section 3 presents and discusses the budget efficiencies in terms of allocative and technical perspectives and what needs to be done differently. Conclusions and emerging policy actions

are discussed in section 4.

2 METHODS AND DATA

2.1 Methods

The paper approaches the aforementioned questions by analysing different budget outputs' allocative and technical efficiency.

(i) Allocative efficiency involves the prudent use of budget releases. According to Drake and Simpler (2002), allocative inefficiency is the failure to utilize budget releases to produce outputs due to absorption capacity, procurement delays, and delays in donor disbursements, among others. Hence, allocative efficiency is captured using ratio calculations, specifically as the ratio of budget used to budget released. A threshold of 80% is deemed sufficient to determine whether a budget output is inefficient or not.[1] In this case, a budget output is underperforming if the ratio of spending to release is below 80%.

(ii) On the other hand, technical efficiency involves achieving maximum outputs with the least cost. Drake and Simpler (2002) define technical inefficiency as poor outcomes relative to targets or per unit of budget release. Similar to allocative efficiency, technical efficiency is captured using ratio calculations, specifically as the ratio of realised outcomes and target. A threshold of 80% is deemed sufficient to determine whether a budget output is inefficient or not. However, in some cases, the paper computes technical efficiency by showing the difference between achieved and the target benchmark indicator. Negative values suggest that an output is not achieving its intended outcome. In addition, for qualitative indicators, the achieved benchmark indicator is determined whether an output has achieved an intended outcome or not. For example, under the *Industrial Policies, Strategies and Monitoring Services* output, there are four performance indicators, namely: (a) Stage of Competition and Consumer Protection Policy formulation; (b) Stage of the COMESA Treaty Domestication Bill formulation; (c) Stage of Trade Licensing Amendment Act formulation; (d) Stage of Iron and Steel policy formulation and; (e) Stage of Sugar Act formulation. These indicators are tracked using two qualitative indicators: passed by parliament for the first two; and tabled to parliament for the latter two.

While Uganda's budget has 17 sectors based on MoFPED's Directorate of Budget votes and outputs, the ratio analysis focuses on seven (7) sectors. The selected sectors were guided by the government's priority of investing in outputs that contribute to household incomes, poverty reduction, job growth, export promotion, the productivity of households and firms and economic growth. In addition, we extracted targets and outcomes from budget performance reports to assess the allocative efficiency and the variations in the achievement of set targets. The seven selected sectors include agriculture, health, education, trade and industry, social development, works and energy sectors. An in-depth analysis of the largest single sector, agriculture, was conducted to illustrate many of the considerations involved in budget reprioritisation.[2] The other sectors are not analysed so extensively because many of the same issues exist. The budget outputs by sector are provided in the attached excel file with colour codes as shown in Table 1.

1 https://www.cepal.org/sites/default/files/project/files/annex_7_methods_of_measuring_economy_efficiency_and_effectivenes.pdf

2 Agriculture is the largest employer and source of livelihood for many Uganda. Giving it attention will address poverty reduction and household and firm productivity considerations.

Table 1 Key to Excel Sheets Colour Coding

S/No	Sector	Colour Code in the Excel Sheet
1.	Agriculture	Agriculture (Allocative)
		Agriculture (Technical)
2.	Health	Health (Allocative)
		Health (Technical)
3.	Education	Education (Allocative)
		Education (Technical)
4.	Trade and Industry	Trade and Industry (Allocative)
		Trade and Industry (Technical)
5.	Social Development	Social Development (Allocative)
		Social Development (Technical)
6.	Works	Works (Allocative)
		Works (Technical)
7.	Energy and Mineral Development	Energy and Mineral Development (Allocative)
		Energy and Mineral Development (Technical)

Source: Authors' own Computation

2.2 Data Sources

The paper relied mainly on budget data from the Directorate of Budget for the most recent financial years spanning 2016/17 to 2020/21. The data extracted included development and recurrent (wage and non-wage) transfers by source of funding – government or external financing. The detailed data on the 7 selected sectors was extracted.

2.3 Data caveats

However, there were some challenges with the data provided. First, data harmonisation. While the description of the output in the sector and programmes data is similar, the output codes in the sector budget do not match the output codes in the programme budget. This presented a challenge in matching the sector data to the programmes. Put differently, the shift from sector - to programme-based budgeting is yet to be reflected in the data. There is a need to harmonise the output codes in both budgets to ease the integration/merging of the two data sets. Second, there was an annual recurrence of redundant outputs in the budget data. Such outputs reflected in the data have not been funded at all or only funded once, and their continued existence may create room for corruption. Third, inconsistencies in the outcome indicator measures in the budget performance reports led to discretion in reporting.

3. ALLOCATIVE AND TECHNICAL EFFICIENCIES OF SELECT SECTORS - FINDINGS

3.1 Agriculture

The agriculture sector has eight (8) votes (MAAIF, NAADS, NARO, NAGRIC, UCDA, DDA, KCCA and UCDO) identified for receiving more financing. The relative ratio efficiency values for agriculture budget by output are presented in Table A2 in Annex 3.[3] Generally, agriculture exhibits relatively high allocative efficiency across the different outputs. Specifically, the allocative efficiency is largely above 80% for most Wage, non-wage (CAPEX) and development outputs. However, given that the focus of this paper is largely on the development, Table 2 presents trends in the agriculture

3 This can also be viewed on Table 1 in the accompanying excel sheet

budget for outputs that are fluctuating in performance from the pre-determined threshold of 80%. Table 2 suggests that most of the underperforming outputs are under the Ministry of agriculture vote. Examples of under- performing but potentially transformative output under the ministry of agriculture vote, which are critical to addressing policy objective, are *Construction of irrigation schemes*, *Control of pests and diseases in priority commodities, and Increased value addition in the sector.* Under the Dairy Development Authority, a transformative output such as *Purchase of Specialised Machinery & Equipment* and *Quality assurance and regulation along the value chain* have fluctuated in performance in the years under review. The specialised equipment and quality assurance is necessary for preservation and storage and health and safety of milk for both the domestic and export market.

Table 2 Allocative Efficiency of Agriculture Development Budget

	2016/17	2017/18	2018/19	2019/20	2020/21
Ministry of Agriculture					
Construction of irrigation schemes	100%	31%	4%	100%	70%
Control of pest and diseases in priority commodities	100%	100%	100%	89%	67%
Creating and Enabling environment for Agriculture	100%	99%	100%	99%	79%
Crop production technology promotion	97%	100%	96%	96%	78%
Food and nutrition security	90%	88%	50%	98%	97%
Increased value addition in the sector	100%	100%	65%	82%	60%
Livestock marketing facility construction	81%	100%	66%	90%	100%
Policies, laws, guidelines, plans and strategies	100%	100%	83%	91%	70%
Promotion of Production & Productivity of priority commodities	100%	100%	37%	84%	71%
Purchase of Motor Vehicles and Other Transport Equipment	100%	58%	86%	93%	95%
Purchase of Office and ICT Equipment, including Software	99%	80%	60%	92%	73%
Quality Assurance systems along the value chain	98%	100%	57%	98%	74%
Roads, Streets and Highways		9%	23%	76%	93%
Dairy Development Authority					
Government Buildings and Administrative Infrastructure	100%	93%	100%	94%	65%
Purchase of Specialised Machinery & Equipment	24%	100%		100%	24%
Quality assurance and regulation along the value chain	55%	100%	100%	100%	55%
Kampala Capital City Authority					
Market Access for Urban Agriculture	100%	98%	94%	61%	97%
NAADS Secretariat					
Purchase of Office and ICT Equipment, including Software	100%	132%	96%	73%	97%
Purchase of Office and Residential Furniture and Fittings	98%	100%	62%	44%	89%
Uganda Coffee Development Authority					
Purchase of Office and Residential Furniture and Fittings				67%	

Broadly, from Table A3 in Annex 3, there was full utilisation of released funds under the domestic development budget compared to those externally sourced for the same outputs.[4] This holds across the financial years, except for the purchase of office and ICT equipment, including software. The allocative efficiency for external development funds ranged from 8.8% to 93.2%. For example, the construction of irrigation schemes efficiently allocates the development budget's domestic contribution but allocates zero percent of the external portion of the development budget in 2017/18 and 2018/19. The underutilisation could result from stringent measures applied in monitoring externally financed development outputs and a lack of monitoring domestically financed development budget. It could be a case of delays in procurement, the requirement to compensate project affected persons, absence of feasibility studies and counterpart funding, and stringent donor monitoring and evaluation systems that lead to underutilisation of externally financed development budget. Donors also demand a full restoration and compensation of project affected persons, and this may delay implementation of project (see Table A3 in Annex 3). We also observe financing for the construction of irrigation schemes have been mainly planned under the donor development budget, which will depend on donor commitments.

In addition, Table A3 in Annex 3 disaggregates the development budget into two financing components: domestic and external; and suggests that most externally financed development outputs are not strong in allocative efficiencies. Examples of such outputs are *increased value addition; purchase of office and ICT Equipment, including Software; Quality Assurance systems along the value chain; and Roads, Streets and Highways.* Following this observation, it may be important to discuss this with the donors on the possibility of re-channelling such funds to other key priority sectors/outputs in line with the country's short-term goals of increasing household incomes and exports, among others.

Moving the discussion to technical efficiency, we observe varying levels with some output areas achieving full efficiency (realising the outcome targets), some output areas over achieving (realising more than what was targeted) and some output areas under achieving (realising less than was targeted). More specifically, the discussion will now focus on earlier identified potentially transformative outputs to discern whether with low allocative efficiency translates into low technical efficiency. Table A4 in Annex 3 suggests that outputs designated for *Control of pests and diseases in priority commodities* are achieving their targeted outcomes in most of the years reviewed except for 2017/18 where tracking of indicators was poor. However, the indicators do not measure outcomes sufficiently. The indicators are *No. of mobile plant clinics established and operational; No. of agro chemicals registered; No. of chemical dealers premises registered; and No. of staff trained in pest surveillance, diagnostics and control.* The indicators are more likely a measure of outputs than outcomes. In addition, some outputs such as *Increased value addition in the sector* do not have outcome indicators, which constrains the tracking of budget performance.

Other outcomes such as those for *Promotion of Production & Productivity of priority commodities* are only captured in 2016/17 and missing in all other years. The three indicators captured in 2016/17 for the above mentioned output are *Percentage change in animal disease and vector outbreaks; Percentage change in number of animals produced for market; and Percentage change in rejection of animal and animal products due to poor quality and safety.* Table A4 in Annex 3 suggests that there was a good performance in the three indicators with a scores of -2%, 6%, and -8% respectively.[5]

In addition, in agricultural-dependent economies like Uganda, extension services have been the main conduit for disseminating information on-farm technologies, supporting rural adult learning, and assisting farmers in developing their farm technical and managerial skills. It is expected that extension programmes will help increase farm productivity, farm revenue, reduce poverty and minimize food insecurity. From Table 3 the government has not hired extension workers from

4 This can also be viewed on Table 2 in the accompanying excel sheet

5 This can also be viewed From Table 3 (placed in the red excel worksheet named agriculture (technical))

the 2020/21 target of 363. At the local government level, none of the district local government has been facilitated to provide extension service (Table A4). No farmer of the target 1,000 in 2018/19 has been trained in increased value addition of priority commodities, which is critical for exports (Table A4). This implies that the government is not performing well when choosing the right mix to produce the best outcomes. Hiring staff in these output functions will also address social protection considerations through a wage and salaries guarantee. There are spill-over effects of a wage job through consumption, payment of taxes and support to extended family members.

There is a need to enhance development financing to UCDA for critical outputs necessary for enhancement of exports such as *Information Dissemination for Marketing and Production; Production, Research & Coordination; Purchase of Specialised Machinery and Equipment; Quality Assurance; and Value Addition and Generic Promotion* (Table A2). These outputs have not received financing for the last 5 years. Investment in such will support the poorly performing outcomes such as those under the quality assurance output of UCDA. For instance, Table A4 suggests that the number of Fairly Average Quality (FAQ) samples (clean coffee) analysed was below the target of 17,000 by 14,734; the number of coffee bags certified for export (million 60-kg bags) was below the target of 4.6 million bags by 400,000, and the number of quality certificates issued was below the target of 21,500 by 8,544.

Table A5 suggest that there is a scope for consolidation of some of the duplicated budget outputs. However, the separation granted to crops, livestock, and, more recently, to fisheries sub-sectors, and the different stages of development of those three budget outputs are likely to complicate extensive output consolidation. However, there is a scope for consolidating similar budget outputs to enhance efficiency and monitoring. Several consolidation options are suggested in Table A5. First, funding for agricultural production extension services and the provision of Value Addition extension services go pretty much hand in hand.[6] In addition, there might be scope for exploring amalgamation of measures, commodities, and services for pest control (Marked in blue); Value addition (in light blue); quality assurance (in green); production and productivity (baby blue); research and technology (in purple); special (decentralised) entities (light green); value addition (light blue); pest and disease (blue); agriculture infrastructure (red); and general administration (brown). However, consolidation should be done with consultation with stakeholder to ensure uniformity and/or synergies in the work plans of consolidated outputs.

In regard to transformative outputs, Table A6 suggest that the reduction of Foot and Mouth Disease (FMD) would expand export and household income opportunities. In addition, the development of anti-tick measures would save the country up to 2% of GDP annually. As earlier mentioned, the provision of extension services would also address poor practices and disseminate technologies/inputs in production, value-addition, breeding of chicken and fish and marketing. Also efforts to enhance production and productivity through the distribution of seed, seedling, storage and fertilizer should be given priorities. Quality assurance activities should also be stepped up to reduce on non- compliance to sanitary and phyto-sanitary requirements. This will address the difficulties experienced exporting maize to Kenya and horticulture to Europe. Related to quality assurance, and as earlier mentioned, UCDA needs to be supported to actualise the following outputs: *Information Dissemination for Marketing and Production; Production, Research & Coordination; Purchase of Specialised Machinery and Equipment; Quality Assurance; and Value Addition and Generic Promotion.* This will support the objective of improving Uganda's coffee export value through quality improvement. There is a scope to enhance the capacity for utilization of the existing agricultural infrastructure. For example, there is low utilization of the existing warehousing capacity. Lastly, value addition is pertinent for household income and exports. Therefore, expanding the processing capacity for commodities, especially sugar, cassava, tea and fruit is imperative.

3.2 Health

Broadly the health sector has seventeen (17) votes (MOH, Uganda AIDS Commission, Uganda Cancer

6 Also marked in yellow in Table A2 in Annex 3 and Table 1 in accompanying excel sheet

Institute, Uganda Heart Institute, National Medical Stores, KCCA, Health Service Commission, Uganda Blood Transfusion Service (UBTS), and 8 national referral hospitals identified for receiving more financing. Table 3 suggests fluctuations in allocative efficiency of some identified development outputs critical for the health sector's response to COVID 19 and recovery.[7] Outputs such as *Community Health Services (control of communicable and non-communicable diseases)*; *Coordination of Clinical and Public Health emergencies including the Nodding Disease; Coordination of Clinical and Public Health including the Response to the Nodding Disease; Preventive and curative Medical Supplies (including immuninisation, Monitoring and Evaluation Capacity Improvement; Technical Support, Monitoring and Evaluation; and Monitoring, Supervision and Evaluation of Health Systems* under the Ministry of Health.

7 Also in Table 4 and marked in the yellow in the accompanying excel worksheet marked as health (allocative))

Table 3 Allocative Efficiency of Health Development Budget

	2016/17	2017/18	2018/19	2019/20	2020/21
Ministry of Health					
Community Health Services (control of communicable and non-communicable diseases)			32%	56%	100%
Coordination of Clinical and Public Health emergencies including the Nodding Disease			46%	77%	
Government Buildings and Administrative Infrastructure	26%	162%	44%	35%	100%
Coordination of Clinical and Public Health including the Response to the Nodding Disease	100%	69%			
Health centre construction and rehabilitation			16%	1%	35%
Hospital Construction/rehabilitation	100%	97%	57%	58%	100%
Monitoring and Evaluation Capacity Improvement		58%	19%	44%	87%
Monitoring, Supervision and Evaluation of Health Systems			42%	78%	85%
Preventive and curative Medical Supplies (including immuninisation)	98%	67%	100%	100%	73%
Purchase of Motor Vehicles and Other Transport Equipment	100%	27%	75%	46%	21%
Purchase of Office and ICT Equipment, including Software	29%	8%	3%	80%	100%
Purchase of Office and Residential Furniture and Fittings	100%	100%		100%	14%
Staff houses construction and rehabilitation		46%			
Strengthening Capacity of Health Facility Managers	100%	5%	15%	95%	48%
Technical Support, Monitoring and Evaluation			43%	57%	52%
Transfer to Autonomous Health Institutions	100%	100%	100%	100%	53%
Uganda AIDS Commission					
Government Buildings and Administrative Infrastructure	1%	87%			100%
Purchase of Motor Vehicles and Other Transport Equipment	49%	94%	100%		100%
Uganda Cancer Institute					
Cancer Institute Support Services	100%	78%			

	2016/17	2017/18	2018/19	2019/20	2020/21
Uganda Heart Institute					
Purchase of Office and ICT Equipment, including Software	100%	100%	51%	77%	100%
National Medical Stores					
Purchase of Motor Vehicles and Other Transport Equipment					56%
Health Service Commission					
Uganda Blood Transfusion Service (UBTS)					
Purchase of Office and Residential Furniture and Fittings	9%				
Kampala Capital City Authority					
Provision of Urban Health Services					70%
Kabale Referral Hospital					
Government Buildings and Administrative Infrastructure		100%	100%	76%	100%
OPD and other ward construction and rehabilitation		100%	100%	46%	
Moroto Referral Hospital					
Staff houses construction and rehabilitation	13%	100%	100%	93%	99%
Maternity ward construction and rehabilitation		100%	100%	61%	100%
Lira Referral Hospital					
Outpatient services	13%				
Purchase of Motor Vehicles and Other Transport Equipment	6%		100%		
Purchase of Office and Residential Furniture and Fittings	33%		100%	100%	100%
Purchase of Specialised Machinery & Equipment	67%	100%	100%	100%	100%
Soroti Referral Hospital					
Hospital Construction/rehabilitation	100%	5%	100%		
Staff houses construction and rehabilitation	100%	64%		100%	
Fort Portal Referral Hospital					
Hospital Construction/rehabilitation	99%			98%	76%

The above fluctuations could be related to the unmet provisions for wage and non-wage budget requirements in the health sector, for these are expected to parallel each other. Table 4 (in the yellow excel worksheet marked as health (allocative)) suggest there is little to no facilitation for wage and development outputs that are critical for recovery of the health sector. Outputs such as diagnostic services, immunisation services, medicines and health supplies, outpatient services, records management services, indoor residual spraying (IRS) services, and National Health Insurance Scheme, among others, have low staffing (MoH, 2015). It defeats the purpose to procure expensive and specialised diagnostic equipment when there is no staff to use the equipment. This is in line with key issues identified in the health sector in the BMAU briefing paper (MoFPED 2017).

However, sometimes equipment is bought by donors without considering the mismatch between the equipment and staffing or the need for recurrent funds to operate and maintain the equipment. For example, the many donations of vehicles to support ambulatory services without providing support to fuel or maintenance of the vehicles. This calls for oversight on the acquisition of technology in the health sector, especially the *big-ticket* equipment.

Over the years, Uganda's health budget exhibited an over-reliance on external financing to finance most of

the development activities Table 5 (in the yellow excel worksheet marked as health (allocative)). Much of the donor financing is geared towards health systems development. The funds are allocated with the aim of functionalising existing facilities and improving the referral hospital (Table 5). However, donor funds are largely not integrated with government budgets and therefore may not address emerging (COVID-19 related) prioritise. It may be important to bring this up for discussion with the donors on the possibility of re-channelling such funds to other key priority sectors/ outputs in line with the country's short-term goals. This suggests that many aspects of off-budget resources are not being used optimally. It also portends that the ministry of health does not track many resources in the health sector. This calls for data and information on those resources to be placed, broadly, in the planning framework. However, negotiating may favour the donors and suppliers due to lack of capacity or state capture and promotion of self-interest among bureaucrats.

Nevertheless, the shares in the development budget in 2020/21 suggest a rapid expansion of the domestically resourced component of the development financing of the community health services (control of communicable and non-communicable diseases) and government buildings and administrative infrastructure (Table 5). This expansion could be a response to increased health needs presented by COVID-19 and is accompanied by a significant reduction in external financing in 2020/21 (also due to COVID-19).

However, there is a need to re-prioritise resources from government buildings and administrative infrastructure to immunisation, medicine and health supplies, and outpatient services unless the building has reached a critical stage such as roofing. While most district hospitals urgently need repair, the Ugx 16.7 billion allocated annually for the rehabilitation of the district infrastructure could be re-allocated to urgent earlier mentioned activities such as immunisation, medicine and health supplies, and outpatient services. Expected outpatient attendance has fallen during the COVID-19 period (2020/21) in Gulu, Hoima, and Jinja, among other referral hospitals, by 54,225; 61,477 and 70,069 respectively (Table 6(in the yellow excel worksheet marked as health (technical)). Due to the scarce availability of public sector funds, leveraging existing resources with those of the private sector has been a popular modality of alternative health financing in many developing countries.

In addition, evidence suggests that outputs under regional hospitals could be consolidated. However, the information, knowledge, analysis, and expertise of the Ministry of Health play a vital role in the effective allocation of the health transfers and, one suspects, particularly for hospitals. While those better informed may recommend otherwise, evidence suggests that outputs under diagnostic services, outpatient services, records management services might be consolidated to provide the regional hospitals more flexibility in designing the organisation of Primary Health Care (PHC) services. The obvious caveats apply.

Acquisition and analysis of the necessary data are unlikely to change with budget output consolidation. Some consolidation might reduce regional hospitals transaction costs marginally, with greater gains realized through having more flexibility in allocating resources. The high transaction costs could result from the earlier mentioned low staffing, which witnessed poor outcomes in some regional hospitals in the years under review. Table 6 suggests poor performance in diagnostic services indicators such as laboratory tests carried out, x-rays (imaging) and Ultrasound Scans taken in most referral hospitals, including Arua, Fort Portal, Gulu, Hoima, etc. In addition, immunisation services are below target in most referral hospitals (Arua (7,890), Gulu (1,572), and Jinja (266), among others.

There is a disconnection between the policy objectives of developing a vaccine and budget priorities. There is no wage facilitation for scientists at UVRI (Table 4), and in response, there are no expected outcomes for CAPEX inputs invested under the UVRI vote (Table 6). This suggests an absence of processes of monitoring and accounting for budgets allocated for this output, which may be a consequence of either a focus on input-based budgeting; or a lack of awareness around program-based budgeting. There is a mismatch between the policy directives of moving into preventive as opposed to curative health care.

The re-prioritisation to COVID-19 related health response should not translate into a decrease for other non-COVID-related health programmes. Continued neglect of other items such as support to the recruitment of health workers at HC III and IVs (Table 4) will adversely impact health.

As a matter of general housekeeping, and despite past reform efforts, the health sector in Uganda still budgets by health facility (regional referral hospitals have votes) and input rather than by services. This is primarily a relic of sector budgeting and suggests a reluctance to transit to programme budgeting. This makes it complex to pool resources, spend and strategically purchase health services. Moreover, financing for referral hospitals should be based on the population in a given area instead of financing based on the number of health facilities in an area – this will ensure equal access to resources and reduce the burden on existing resources. However, programme budgeting goes beyond the concept of integration to automation and technology use, which requires a substantial investment in capacity enhancement from central to sub-national level.

3.3 Education

Broadly, the education sector is an efficient user of resources except for development spending on output listed on Table 4. For example, performance in allocative efficiency is below the threshold of 80% in outputs concerning construction of primary school in 2016/17 due to delays in review by IDA/World Bank in bid evaluation report for construction of primary schools under centralized procurement. In addition, there was insufficient funding to implement construction works at dilapidated secondary school. There were also deficiency in allocative of *Monitoring and Supervision of primary school.*

Table 4 Allocative Efficiency of Education Development Budget

	2016/17	2017/18	2018/19	2019/20	2020/21
Classroom construction and rehabilitation (Primary)	30%	90%	117%	35%	99%
Construction and Rehabilitation of facilities	89%	94%	100%	54%	100%
Construction and rehabilitation of learning facilities (BTEVET)	75%	47%	38%	21%	108%
Government Buildings and Administrative Infrastructure	73%	101%	84%	88%	75%
Instructional Materials for Primary Schools	64%	95%			
Monitoring and Supervision of BTVET Institutions	42%	100%	74%	43%	100%
Monitoring and Supervision of Primary Schools	96%	50%	40%	135%	
Operational Support to UPPET BTVET Institutions	21%	11%	7%	45%	
Policies, guidelines to universities and other tertiary institutions	100%	99%	68%	89%	43%
Policies, Laws, Guidelines and Strategies	86%	89%	71%	60%	
Purchase of Office and Residential Furniture and Fittings	7%	100%	100%	40%	100%
Purchase of Specialised Machinery & Equipment	33%	68%	75%	55%	
Training and Capacity Building of BTVET Institutions	4%	11%	33%	25%	44%
Training of Secondary Teachers	42%	100%			99%
Busitema					
Purchase of Specialised Machinery & Equipment			64%	86%	43%
Muni					
Acquisition of Land by Government	29%	100%			
Soroti University					
Government Buildings and Administrative Infrastructure	99%		46%	43%	

In regard to technical efficiency, Table 5 suggests that emergency Construction of Primary Schools Phase II sub-programme under Pre-Primary Education performed poorly in 2017/18. None of the 52 primary schools were completed. Most schools received funds and commenced construction in Q4 and were just commencing procurement. In 2018/19, instructional Materials for Primary which had arrears that remained outstanding. However, there was an over performance in the outcome related to construction and rehabilitation primary school classrooms. No explanation has been provide for this indicator. It could be a data recording issue. The poor outcome in monitoring and supervision of primary school project in 2019/20 this could be a result of travel restrictions imposed in the second half of the financial year, which presented logistical challenges in the implementation of that output.

Table 5 Technical Efficiency of Education Development Budget

	2016/17	2017/18	2018/19	2019/20	2020/21
Classroom construction and rehabilitation (Primary)					
No. of classrooms constructed (Primary)	0%		3300%		43%
No. of rehabilitated primary	0%		2100%		75%
No. of new secondary classrooms	55%				
Instructional Materials for Primary Schools					
No. of Instructional materials	19%			100%	
Monitoring and Supervision					
Monitoring and Supervision of primary school	64%			37%	100%

However, there is a scope for consolidating some outputs to facilitate flexibility and in-year budget movement and virements. However, the priority given to primary and, more recently, to secondary schooling, the different stages of development of those two programs, and the continuing extension of primary education in most jurisdictions are likely to complicate extensive budget output consolidation. Nevertheless, several consolidation options can be suggested. First, all the research items (marked in red in Table 7) under the university vote go pretty much hand in hand. In addition, there might be scope for exploring amalgamation of school inspection and Community civic education (marked in light green in Table 7), both under the KCCA vote. Also, advocacy, sensitisation, information dissemination, and education data and information services are placed adjacent under the MoES vote (marked in light blue in Table 7). It is possible that flexibility in the use of instructional material at both the primary and secondary levels would benefit the MoES. Perhaps more helpful would be an extension to provide greater flexibility in policies, laws, guidelines, and strategies (marked in yellow in Table 7).

Under all these proposals, it is expected that the amount of the consolidated transfer would be determined in much the same way as at present. That is, MoFPED would determine the amounts deemed to be required for each output and then amalgamate those to meet the selected level of consolidation. The advantage of consolidation to the recipient is that the consolidation may afford some greater flexibility in using the funds; that flexibility provides some benefit. From an outcome perspective, flexibility, afforded by consolidation may improve the rate of undertaking research and rolling out research findings and innovations for implementation at most public universities, which is currently below 50% for all universities (Table 8). It may also improve the procurement of instructional material, which is currently at a deficit of 1,950,076 textbooks (Table 8). Also, improve teachers' continuous training and retooling to teach in a post lockdown environment (under Policies, laws, guidelines plans and strategies output) (Table 8).

From the central government's perspective, there may be less monitoring required of specific uses as the concern is for the consolidated amount rather than the various components. While that may be true from

an audit perspective, there is also the management or allocative perspective. Determining the appropriate funding for primary and secondary schools and the allocation across the different votes requires substantial information, analysis and expertise. The MoES currently provide that. The monitoring for management purposes is unlikely to be diminished in the near term by output consolidation.

The consolidation of outputs for schooling offers opportunities for increasing and for decreasing performance, costs, and satisfaction. It is very likely all parties will be impacted in multiple ways, and the net effects to each and overall are not obvious. The uncertain consequences of consolidation suggest that widespread consultation could help. Inputs from districts with representation from those with diverse situations and from the MoES as to potential advantages and disadvantages are essential. MoFPED must also be included.

As for development budgets in the education sector, there is a need to curtail expenditures on motor vehicles; construction of new classrooms; and Purchase of Office and ICT Equipment, including Software. But instead, spend on rehabilitation of classrooms and instructional materials. In general, school financing should be on a per-student basis (probably with adjustments for level and special conditions); these incentives will be broadly consistent with the universal provision of education objectives.

Similar to the heath sector, the education sector in Uganda is still partly budgeted for at the education facility level (universities have separate votes) and input rather than by services which breed the earlier mentioned problem.

In regard to transformative outputs, keeping *Instructional Materials for Primary Schools* at pre-COVID 19 level will pertinent to addressing the challenges presented by COVID19. In addition, support to private primary and secondary schools to avoid foreclosure and maintain the level of teaching staff. There is a need to also support research *Research and Graduate Studies* to position Uganda in race for development of vaccine and treatment of COVID -19 and other communicable and non-communicable diseases.

3.4 Trade and Industry

Trade and industry will address the objective of firm productivity and exports. Table 6 suggests that initially in 2016/17, there were absorption issues under the MTIC vote, but that has been resolved over the last 3 years (2018/19 to 2020/21). However, budget output under MTIC vote related to *Purchase of Office and ICT Equipment, including Software and Purchase of Office and Residential Furniture and Fittings; and budget output under the* Uganda Export Promotion Board related to Purchase of Office and Residential Furniture and Fittings (Table 6).

Table 6 Allocative Efficiency of Trade and Industry Development Budget

	2016/17	2017/18	2018/19	2019/20	2020/21
MTIC					
Capacity Building for Jua Kali and Private Sector	69%	100%	100%	100%	99%
Capacity Building for Trade Facilitating Institutions	64%	-	100%	100%	100%
Economic Integration and Market Access (Bilateral, Regional and Multilateral)	34%			100%	
Human Resource Management Services	43%			100%	
Industrial Policies, Strategies and Monitoring Services	52%			100%	100%
Policy, Consultation, Planning and Monitoring Services	67%	100%	100%	100%	100%
Purchase of Motor Vehicles and Other Transport Equipment	61%	100%	100%	-	-
Purchase of Office and ICT Equipment, including Software	44%	100%	99%	87%	62%

	2016/17	2017/18	2018/19	2019/20	2020/21
Purchase of Office and Residential Furniture and Fittings	50%	100%	99%	0%	82%
Research, Information and Statistical Services	63%	100%	100%	100%	100%
Sector Coordination and Administrative Services	59%	100%	100%	84%	100%
Trade Information and Product Market Research	60%	100%	100%	100%	100%
Uganda Export Promotion Board					
Purchase of Motor Vehicles and Other Transport Equipment	64%	100%	100%	-	-
Purchase of Office and ICT Equipment, including Software	46%	-	-	-	-
Purchase of Office and Residential Furniture and Fittings	50%	100%	94%	64%	23%

From Table 10 in the accompanying excel sheet suggest that the shares in the development budget suggest absolute domestic financing of most industrial development output. This expansion is accompanied by a significant reduction in donor interest in financing industry and tourism and trade (and agriculture; water and environment; education; law and order and public administration sectors) in the medium term.

In addition, there has been inadequate staffing (proxied by no wage allocation from 2018/19 to 2020/21) in outputs critical to enterprise development, firm productivity, and exports, which point to a mismatch between policy objectives and budget priorities. Examples of these outputs are capacity building for Jua Kali and Private Sector, Enterprise Training and Advisory Services, Industrial Information Services, and MSMEs Human Capital Development. Consequently, the outcomes for these examples of outputs have been less desirable. Table 10 suggest that in 2019/20, there was a 5% deficit in the numbers of Jua kali artisans trained; low rate (13 percent (only 10 of the targeted 80 industries)) of the number of enterprises for whom data is captured in the National Industrial Database. We note that such mismatch may point to a larger issue of failure to understand government objectives such as industrialisation by the implementing authorities.

However, consolidation could offer flexibility to move financing between the year to produce results. Example from Table 9 suggests that Cooperatives Establishment and Management and Cooperatives Skill Development and Awareness Creation could be merged into one output. In addition, industrial information services and industrial policies, strategies and monitoring services could also leverage synergies. MSMEs Human Capital Development, MSMEs Information Services, and MSMEs Policies, Strategies and Monitoring Services look very similar. Records Management Services, Research, Information and Statistical Services and Sector Coordination and Administrative Services could also move hand in hand.

All the output under UIRI and Uganda Tourism Board have not been provided support, yet they are critical for industrial and tourism development (Table 9). However, the former (UIRI) output could be merged in the broader industrial outputs under MTIC. Staffing support for Calibration and verification of equipment and development of standards under the UNBS vote is also required; this is critical for industrial development.

There is evidence of the absence of proper transition towards programme-based budgeting (PBB) by the trade, tourism, and industry sector. Many outcomes from the outputs (marked in red in Table 10 do not have performance indicators. For instance, there are no indicators for Enterprise Training and Advisory Services; MSMEs Human Capital Development; and Records Management Services, among others. This practice weakens the link between strategies, annual plans, sector policies and budgets. However, careful comparison with Table 9 reveals that these budget items do not have an allocation.

3.5 Social development

The social development sector has two programmes geared toward improving youth employment (Youth Livelihood Programme (YLP)) and Women-led

enterprises (Uganda Women Enterprise Programme (UWEP)). The programmes have a domestically financed development budget that is well utilised (Table 11). However, the number of women groups benefitting from the UWEP programme in 2020/21 is below the target of 3,530 by 1,934 (Table 12). On the other hand, and in the same period, only 2 Youth benefitted from YLP; and none of the 4,400-youth earmarked for training in non-formal vocational and life skills was trained (Table 12). Given its low performance, the latter programmes (YLP) is ripe for consolidation with other integrated government program such as Emyooga and the Parish Development Model (PDM). In addition, outputs on *Government Buildings and Administrative Infrastructure* under KCCA vote and *Government Buildings and Administrative Infrastructure* under the Equal Opportunities Commission have had low allocative efficiency in 2020/21 and 2019/20 respectively.

3.6 Infrastructure (Roads and work and energy and mineral development)

The infrastructure development budget was broadly allocative efficient except for countable fluctuations that scored below the threshold of 80% as show by Table 7 due to challenges related to types of delays: in collection and updating of road condition data by designated agencies to facilitate planning process and submission of quarterly accountability reports by designated agencies. The challenges were also related to unqualified personnel at the works and technical services department of Local Governments; lack of adequate road maintenance equipment at the designated agencies and delays in payment for road construction equipment by the chief mechanical engineer.

Table 7 Allocative Efficiency of Infrastructure Development Budget

	2016/17	2017/18	2018/19	2019/20	2020/21
Ministry of Works and Transport					
Border Post Rehabilitation/Construction	100%	100%	100%	36%	100%
Construction/Rehabilitation of Inland Water Transport Infrastructure	100%	100%	13%	57%	100%
Purchase of Specialised Machinery & Equipment		98%	57%	146%	100%
Road Safety Programmes Coordinated and Monitored	100%	100%	93%	100%	81%
Safety of navigation programs coordinated and monitored			100%	11%	97%
Major Bridges	100%	160%	173%	79%	100%
National Road Construction/Rehabilitation (Bitumen Standard)	77%	69%	83%	81%	91%
Purchase of Office and ICT Equipment, including Software	9%	100%	100%	100%	100%
Kampala Capital City Authority					
Drainage Construction		8%		95%	32%
Traffic Junction and Congestion Improvement		56%	74%	73%	157%
Upgrading of public structures			63%		
Urban Road Maintenance		53%	97%	100%	96%
Ministry of Energy and Mineral Development					
Acquisition of Other Capital Assets	107%	44%	37%	43%	99%
Capacity Building for the oil & gas sector	98%	65%	75%	96%	100%
Energy Efficiency Promotion	99%	54%	100%	98%	100%
Energy Policy/Plans Dissemination, Regulation and Monitoring	99%	49%	72%	100%	100%

	2016/17	2017/18	2018/19	2019/20	2020/21
Large Hydro Power Infrastructure	100%	68%	107%	98%	100%
Purchase of Office and Residential Furniture and Fittings	71%	100%	91%	49%	100%
Purchase of Specialised Machinery & Equipment	99%	17%	76%	91%	72%
Renewable Energy Promotion	99%	76%	100%	100%	100%
Rural Electrification Agency (REA)					
Construction of Rural Electrification Schemes (On-grid)	100%	84%	101%	67%	99%

Table 14 in the accompanying excel sheet suggest that there is low absorption of external financing of Drainage Construction (32%); Construction/Rehabilitation of Inland Water Transport Infrastructure (56%), and National Road Construction/Rehabilitation (Bitumen Standard) (45%). These problems could be emanating from two types of delays emanating from Development Partners: there were deferrals in settlement of certificates by some development partners which affected project implementation and delays in giving a no objection to procurement processes by some Development Partners affected project implementation and hence funds absorption. Nevertheless, there were inadequate and unbalanced release of GoU funds with most of the funds being released in the fourth quarter which affected project implementation.

Table 8 suggests that there were realised low outcomes of outputs related to National Road Construction/ Rehabilitation (Bitumen Standard) and upgrade of inland Water Transport Infrastructure in the first year of construction 2016/17. Most importantly, there is intermittent reporting of transport related indicators. Nevertheless, it is encouraging to note that the energy sector outcome indicators improve over the years. Table 16 in the accompanying sheets suggest a delay in the construction of the oil infrastructure (with no development allocation for oil infrastructure), which may influence dis-investment and delay in the first oil production.

Table 8 Allocative Efficiency of Infrastructure Development Budget

	2016/17	2017/18	2018/19	2019/20	2020/21
Ministry of Works and Transport					
Border Post Rehabilitation/Construction					
% of construction of Elegu OSBP completed			100%		
% of construction of Katuna OSBP (Phase I & II) completed			106%	100%	
% of construction of exit road at Malaba OSBP completed			100%	100%	
Construction/Rehabilitation of Inland Water Transport Infrastructure	40%		100%		
% of construction works for Kabaale Air Port completed					88%
Major Bridges	85%		100%	60%	
Number of bridges constructed, maintained, resealed and rehabilitated.	13%	72%		83%	73%
National Road Construction/Rehabilitation (Bitumen Standard)					
% of executed road maintenance contracts subjected to independent technical and financial audits*	18%				
% of expenditure for maintenance excuted by private sector (National roads)*	12%				

	2016/17	2017/18	2018/19	2019/20	2020/21
No. (Km) of national paved roads Reconstructed/ Rehabilitated* (equiv km)	32%			83%	53%
No. Km of paved national road maintained (Periodic)*					
No. Km of paved national road maintained (Routine Mechanised)*				82%	71%
No. Km of unpaved national road maintained (Periodic)*	100%				
No. Km of unpaved national road maintained (Routine Mechanised)*					
Kampala Capital City Authority					
Drainage Construction					
Length in Km.of drainage constructed	150%		0%	0%	62%
Urban Road Maintenance					
Length in Km of Urban roads maintained(Bitumen standard)(sq meters incase of pothole resealing)	100%		100%	39%	68%
Length in Km of Urban unpaved roads maintained				41%	95%
Length in Km of drainage maintained					64%
Ministry of Energy and Mineral Development					
Capacity Building for the oil & gas sector					
Number of staff enrolled for professional training in Oil and gas discipline	153%	130%	0%	50%	
Energy Efficiency Promotion					
Number of sites demonstrating use of Improved energy technology	75%		116%	70%	67%
Number of prepaid meters installed	95%		125%	100%	100%
Percentage of Audited firms Implementing Energy efficiency measures					**100%**
Large Hydro Power Infrastructure					
Percentage of land freed up for Karuma Transmission Line	20%		83%	85%	
Percentage of land freed up for Isimba Transmission	41%		93%	95%	
Rural Electrification Agency (REA)					
Number of District Headquarters electrified	40%		221%		
Number of line KM of LV (11KV) constructed	163%		303%		
Number of line KM of MV (33KV) constructed	208%		82%		
Number of Solar systems installed					
Construction of Rural Electrification Schemes (On-grid)					
Number of line Kms of medium Voltage (33KV or 11 Kv) constructed			82%	49%	58%
Number of line Kms of Low Voltage (240v) constructed			410%	51%	99%

Transformational outputs in the energy sector could be matched to the quest for industrialization and business development through electrification of industrial parks. Investment should also be made to establish a robust petro-chemical industry to create jobs and ensure energy security. These investment include: reserve facility, pipeline, refinery, seismic and geological data repository. In regard to the road and works sector, operation and maintenance of urban roads should prioritised. In addition, there is a need to fast track construction and completion of critical oil, tourism roads and other upgrading and rehabilitation projects.

4 CONCLUSION AND POLICY RECOMMENDATIONS

Uganda's budget authority has faced increased fiscal pressure caused by a sudden drop in revenues from the economic slowdown and new expenditure pressures associated with COVID-19 impacts. Consequently, the country has responded by reprioritizing the budget towards sectors that respond to the government's objective of increasing household and firm production and productivity, providing jobs, reducing the health impacts of coronavirus, supporting poverty reduction efforts, promoting exports, and enhancing economic growth. Using budget performance data, this study concludes that:

Generally, there is high allocative efficiency in a majority of the proposed reprioritisation sectors. The education sector stands out in this regard, with absorption rates higher than the threshold of 80%. There is generally a good will to achieve technical efficiency but with varied results across sectors primarily due to institutional constraints and misalignment of priorities.

However, there is much variation in budget funds and their utilisation. There is a missing link between policy objectives and budgets. For example, in the health sectors, there is a mismatch between wage and non-wage (CAPEX) allocations, implying that there are inadequate human resources required to implement the policy objectives, consequently leading to poor outcomes despite the funding provided for CAPEX. Additionally, in the health sector, we observe a disconnect between the policy objective of developing a vaccine and budget financing allocated for the same, and the policy move towards preventive instead of curative health care. From the trade and industry sector, we observe no wage allocations for critical outputs related to enterprise development, firm productivity and exports in 2018/19 to 2020/21, signifying a mismatch between the increasing industrialisation agenda and corresponding budget allocations, especially for needed human resources. To ensure effective budget reprioritisation towards sectors that respond to the country's development objective, the government could consider the following efforts in order to increase household and firm production and productivity, provide jobs, reduce the health impacts of coronavirus, support poverty reduction efforts, promote exports, and enhance economic growth.

First, there is a need to consider the consolidation of budget outputs. Numerous budget outputs are ripe for consolidation to facilitate efficient use of human resources, within-year budget flexibility, accountability, and reduced costs for monitoring. For example, in the agriculture sector, the following outputs (control of pest and diseases in priority commodities, crop pest and disease control measures, vector and disease control in priority animal commodities, vector and disease control measures) could be consolidated. Evidence suggests that outputs under regional hospitals could be consolidated in the health sector. Regarding the education sector, all research outputs, "Research and Graduate studies" and "Research, Consultancy and Publications", could be consolidated into one key research output. In the social development sector, we note that the YLP can be consolidated into proposed mainstream government programs such as *Emyooga* and the Parish Development Model. However, consolidation's uncertain consequence suggests that widespread stakeholder consultation could help. Inputs from mother ministries accounting officers are essential.

Second, ensure stringent monitoring of domestic budget to result in planned outcomes. There is primarily full utilisation of the domestic portion of the development budget and underutilisation of the

externally financed portion. In other words, there is a race to spend the domestic portion of the budget without necessarily realizing outcomes in order to avoid being penalized for failure to utilize allocated financing. The underutilisation of the external portion of the development budget could result from delays in procurement. As the budget is reprioritised to this output, there is a need for an explicit procurement procedure that facilitates strong internal controls and performance management that ensures value for money in purchasing drugs and medicines.

Third, there is a need to discuss the possibility of rechannelling financing to key priority sectors. Broadly, the health budgets exhibit an over-reliance on external financing. However, donor funds are largely not integrated into government budgets and may challenge re-allocation. Therefore, the government should open discussion with donors on the possibility of rechannelling funding to other key priority sectors/ outputs that may help achieve the country's short-term goals. Furthermore, the government needs to leverage existing resources with those of the private sector as a modality for alternative health financing.

Fourth, embrace a comprehensive healthcare programme reprioritisation. For example, caution should be exercised in reprioritising COVID-19 related health responses to avoid neglecting other non-COVID-related health programmes. Continued neglect of other items such as support to the Recruitment of Health Workers at HC III and IVs (Table A4) will adversely impact health.

Fifth, there is a need to move away from output-based budgeting to service-based budgeting programme. For example, from our health and education sector observation, regional referral hospitals and public universities are considered separate votes, yet budgeting should be based on services. This makes it complex to pool resources, spend and strategically purchase goods and services. In this regard, moving from output-based budgeting to health budgets formulated and executed based on goal-oriented programmes can help build stronger linkages between budget allocations and sector priorities. This can also enable the implementation of strategic purchasing and incentivize accountability for sector performance.

Sixth, there is generally an absence of proper transition towards programme-based budgeting (PBB). For example, numerous budget outputs in the trade, tourism and industry sector do not have performance indicators that weaken the link between strategies, annual plans, sector policies and budgets.

Seventh, we recommend that new road construction be paused in the short term so that the available funds can be re-channelled to other urgent and critical areas. However, financing should be set aside to maintain existing roads. Since we observe a low absorption for the construction and rehabilitation of existing roads, we recommend that such financing be re-channelled to other critical and short-term output areas.

Lastly, in carrying out this study, we noticed data measurement, monitoring, and learning issues. Indeed, we faced several challenges with the data: First, there is a discrepancy in the output codes in the sector budget compared to the programme-based budgeting captured in the Programme Implementation Action Plan of the NDP III, which makes matching the sector data to the programmes difficult. In other words, the shift from sector-based to programme-based budgeting is not yet reflected in the data since there is no direct way to link the two. Second, the budget performance data is marred with several redundant outputs that have not been funded or have ceased receiving financing, which may create room for corruption. Third, there are inconsistencies in the outcome indicator measures in the budget performance reports, leading to discretion in reporting.

REFERENCES

Al-Samarrai, S., 2020. *The Impact of the COVID-19 Pandemic on Education Financing,* s.l.: https://thedocs.worldbank.org/en/doc/734541589314089887-0090022020/original/CovidandEdFinancefinal.pdf.

AU, 2014. *Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods,* Malabo, Equatorial Guinea: Africa Union (AU).

AU, 2015. *Agenda 2063: The Africa We Want,* Addis Ababa: Africa Union (AU).

Botswana, R., 2021. *The Power of Being Understood. 2021 Budget Summary,* s.l.: https://www.rsm.global/botswana/sites/default/files/media/New%20folder/botswana_budget_summary_2021-2022.pdf.

CABRI, 2021. *Public Finance Response Monitor,* s.l.: https://www.cabri-sbo.

Drake, L. & Simpler, R., 2002. X-efficiency and scale economies in policing: A comparative study using the distribution free approach and DEA. *Applied Economics,* Volume 34, pp. 1859-1870.

Gentilini, U. et al., 2020. *Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures ("Living paper,* Washington D.C.: https://documents1.worldbank.org/curated/en/295321600473897712/pdf/Social-Protection-and-Jobs-Responses-to-COVID-19-A-Real-Time-Review-of-Country-Measures-September-18-2020.pdf.

Global, T. W., 2020. *COVID-19 Summary Update on Burkina Faso,* s.l.: https://thinkwell.global/wp-content/uploads/2020/05/COVID-19-Burkina-Faso-Update-December-2020-Final.pdf.

Gondwe, G., 2020. *Assessing the Impact of COVID-19 on Africa's,* s.l.: https://unctad.org/system/files/official-document/aldcmisc2020d3_en.pdf.

Guerra, C. A. et al., 2020. Malaria vector control in sub-Saharan Africa in the time of COVID-19: No room for complacency. *BMJ Global Health,* 5(9).

IMF, 2020. *IMF Policy Tracker. Policy Responses to COVID-19,* s.l.: https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19.

Long, C., Fraser, A., Mbate, M. and Lacroix, A., 2021. *Intergovernmental fiscal transfers, equity, and service delivery: Lesson from Uganda,* London: ODI working paper.

Mali, M. d. l. e. d. F. d., 2021. *Rapport sur la situation d'exécution provisoire du Budget de l'État au 31 Décembre 2020,* s.l.: https://finances.ml/sites/default/files/Rapport_compil%c3%a9.pdf.

Margini, F. et al., 2020. *Case Study: The Initial COVID-19 Response in Uganda,* s.l.: ThinkWell and Ministry of Health Uganda.

Matock, J., 2020. *Budget 2020: Ce qui va changer. News Du Camer,* s.l.: http://www.newsducamer.com/budget-2020-ce-qui-va-changer/.

Mauritania, M. o. F. o., 2021. *Rapport sur l'exécution du fonds 3SL2C. Decembre 2020. Trésor Public de la République Islamique de Mauritanie,* s.l.: https://tresor.mr/fr/afficher.php?tb=I-Kesq5qj&id=amY=.

Milken Institute, 2020. *Africa Policy Monitor. COVID-19 Africa Watch,* s.l.: https://covid19africawatch.org/africa-policy-monitor/.

Ministry of Finance, E. P. a. T., 2021. *2021 Budget—Budget Speech & Assumptions and Objectives of the 2021Budget, Part 2. Republic of Seychelles,* s.l.: http://www.finance.gov.sc/uploads/national_budget/2021%20BUDGET%20BOOK%20PART%202-%20BUDGET%20SPEECH%20&%20ASSUMPTIONS%20AND%20OBJECTIVES%20OF%20THE%202021%20BUDGET.pdf.

MoFPED, 2003. *Uganda's Progress in Attaining the PEAP Targets- in the context of the Millennium Development Goals,* Kampala: Ministry of Finance, Planning and Economic Development (MoFPED).

MoFPED, 2017. What are the Key Issues in the Health Sector? BMAU Briefing Paper. Ministry of Finance, Planning and Economic Development (MoFPED).

MoH (2015). Health Sector Development Plan. Ministry of Health (MoH)

OECD, 2004. The Legal Framework for Budget Sys-

tems. An international Comparison. *Journal on Budgeting,* 4(3).

OECD, 2019. *Tax Transparency in Africa: Africa Initiative Progress,* s.l.: Organisation of Economic Cooperation and Development (OECD).

OECD, 2020. *COVID-19 and Africa: Socio-economic implications and policy responses,* s.l.: Organisation of Economic Cooperation and Development (OECD).

PEFA, 2020. *Global Trends in Public Financial Management Performance,* PEFA Secretariat, Washington D.C.: https://www.pefa.org/global-report-2020/en/report/global-pfm-performance/.

Pointe, E., 2020. *Government scraps 13th month pay for 2020,* s.l.: https://www.nation.sc/articles/6851/government-scraps-13th-month-pay-for-2020.

Ssewanyana, S. & Lakuma, C., 2018. *National Planning in Uganda: Retrospect and Prospects,* Kampala, Uganda: Economic Policy Research Centre.

Tandberg, E. & Allen, R., 2020. *Managing Public Investment Spending During the Crisis,* s.l.: https://www.google.com/url?sa=t&rct=-j&q=&esrc=s&source=web&cd=&ved=2a-hUKEwiZI_3so7TxAhVPwzgGHV8PD4QQFjAAe-gQIAhAD&url=https%3A%2F%2Fwww.imf.org%2F-%2Fmedia%2FFiles%2FPublications%2Fcovid19-special-notes%2Fen-special-series-on-covid-19-managing-public-inves.

Torbert, S., Cho, C. & Herrera, G., 2020. *Government budgets responding to crisis: What we can learn from the Ebola emergency,* s.l.: https://www.internationalbudget.org/2020/11/government-budgets-responding-to-crisis-what-we-can-learn-from-the-ebola-emergency/.

Uganda, P. o., 2020. *Press Release: Parliament boosts COVID-19 battle with Shs 284 billion in supplementary budget.,* Kampala, Uganda: https://www.parliament.go.ug/news/4596/parliament-boosts-covid-19-battle-shs-284-billion-supplementary-budget.

UN, 2015a. *Sustainable Development Goals: The 17 Goals,* New York: United Nations (UN).

UN, 2015. *The Millennium Development Goals Report-2015,* New York: United Nations (UN).

UNICEF, 2020. *COVID-19: Upending Investments in Human Capital Across Eastern and Southern Africa,* s.l.: https://www.unicef.org/esa/media/7306/file/UNICEF-ESA-COVID19-Upending-Investments-Human-Capital-2020.pdf.

UNICEF, 2020. *COVID-19: Upending Investments in Human Capital Across Eastern and Southern Africa,* s.l.: https://www.unicef.org/esa/media/7306/file/UNICEF-ESA-COVID19-Upending-Investments-Human-Capital-2020.pdf.

UNODC, 2020. *UNODC. (2020). Covid-19 Emergency Support Packages in West and Central Africa: An overview and analysis of fraud and corruption,* s.l.: https://www.unodc.org/unodc/en/corruption/covid-19-emergency-support-packages-in-west-and-central-africa.html.

WFP, 2020. *State of School Feeding Worldwide 2020,* s.l.: https://docs.wfp.org/api/documents/WFP-0000123923/download/.

WHO, 2011. *The Abuja Declaration: Ten Years On,* Geneva, Switzerland: World Health Organisation (WHO).

WHO, 2021. *Global Health Expenditure Database,* s.l.: https://apps.who.int/nha/database/ViewData/Indicators/en.

ANNEX 1: A SNAPSHOT OF PAST BUDGET REPRIORITIZATION

Budget reprioritisation is a standard tool of public financial management (PFM). Reprioritisation is defined as "the readjustment of expenditures in relation to the current budgetary or medium-term estimates" (OECD 2004). Financial systems and legal frameworks include rules and mechanisms to make it possible, with limits to preserve the credibility of the budget. Extensive in-year movement is often symptomatic of poor planning and budgeting capacity and can hinder the transparency and accountability of the government's management of the budget. However, reallocations can become key in the face of an unexpected event like the 2020 pandemic.

Globally the world has witnessed several declarations that necessitated budget reprioritisation. For example, **the Millennium Development Goals (MDGs)** encouraged a multi-lateral budget reprioritisation favouring anti-poverty programmes. The MDGs was translated into an inspiring framework of eight goals and, then, into wide-ranging practical steps that have enabled people across the world to improve their lives and their future prospects. The MDGs helped to lift more than one billion people out of extreme poverty, to make inroads against hunger, to enable more girls to attend school than ever before and to protect the environment (UN, 2015).

The Sustainable Development Goals (SDGs) are the MDGs' successor and builds on decades of work by countries and the UN. The 17 Sustainable Development Goals (SDGs) are at its heart, which is an urgent call for action and reprioritisation by all countries - developed and developing - in a global partnership. The SDGs recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve the environment (UN 2015a).
After over two decades, the idea of producing national development plans became unfashionable (and was replaced in many cases by the production of Poverty Reduction Strategy Papers); there is evidence that **national development planning has firmly come back into vogue in the late 2000s.** Many developing countries across the global south (including the former HIPC) are seeking to manage the forces of globalisation and to guide their own development through a set of processes, policies and practices that include budget reprioritisation from poverty to development of enabling economic infrastructure in roads and energy sector (Ssewanyana & Lakuma 2018).

Agenda 2063 is Africa's blueprint and master plan for transforming Africa into the global powerhouse of the future. The continent's strategic framework aims to deliver on its goal for inclusive and sustainable development and is a concrete manifestation of the pan-African drive for unity, self-determination, freedom, progress and collective prosperity pursued under Pan-Africanism and African Renaissance. The genesis of Agenda 2063 was the realisation by African leaders that there was a need to refocus and reprioritise Africa's agenda from the struggle against apartheid and the attainment of political independence for the continent, which had been the focus of the Organisation of African Unity (OAU), the precursor of the African Union; and instead to prioritise inclusive social and economic development, continental and regional integration, democratic governance and peace and security amongst other issues aimed at repositioning Africa to becoming a dominant player in the global arena (AU 2015).

In what has come to be termed as the Abuja declaration, on April 2001, heads of state of African Union countries met and pledged to set a target of allocating at least 15% of their annual budget to improve the health sector (WHO, 2011). At the same time, they urged donor countries to "fulfil the yet to be met target of 0.7% of their GNP as official Development Assistance (ODA) to developing countries" (ibid). This drew attention to the shortage of resources necessary to improve health in low-income settings. At that time, the median level of general government health expenditure from domestic resources (GGHE-FS) in African Union Countries was very close to US$103 with a thousand-fold difference between the minimum (US$0.38) and

maximum (US$380) (ibid).

Similarly, the **Malabo declaration** committed to upholding the 2003 Maputo declaration commitment to allocate at least 10% of public expenditure to agriculture and ensure its efficiency and effectiveness for accelerated agricultural growth and transformation for shared prosperity and improved livelihoods. These goals are envisaged to support a more targeted approach to achieving the continent's agricultural vision of shared prosperity and improved livelihoods (AU 2014).

Uganda has witnessed several episodes of budget reprioritisation consistent with its development history. **The Structural Adjustment Programmes (SAPs)** where implemented with technical assistance from the International Monetary Fund/World Bank. Broadly, the objectives of the SAPs rationalizing public expenditure by delineating recurrent from development expenditure, and public sector reforms through wage enhancement and retrenchment of civil servant (Ssewanyana & Lakuma 2018).

There was also the **Poverty Eradication Action Plan (PEAP)**, which was largely a home-grown initiative aimed at poverty reduction with greater attention on the social sectors and pro-poor policies. In addition, the PEAP incorporated global initiatives, especially MDGs, into the government's development strategies (MoFPED, 2003). This was primarily motivated by debt forgiveness through the HIPC and the Multi-lateral Debt Relief Initiative (MDRI) that freed up social expenditure resources and increased aid flow towards the social sectors (Ssewanyana & Lakuma 2018).

The 2010s saw the **return of national development plans (NDPs)**. The NDPs are Uganda's long term development strategy - a strategic vision for transforming Uganda into a middle-income country by 2040. Similar to the global south experience cited earlier, the NDPs marks a paradigm shift from a poverty reduction to a development focus with conceptualisation around strengthening the fundamentals of the economy to harness abundant opportunities around the country (ibid). In particular, the NDPs aims to address the bottlenecks that have curtailed Uganda's development such as weak private sector, undeveloped human resource, inadequate infrastructure, small markets, lack of industrialisation, stagnant agricultural sector, inadequate social sector and poor democracy (ibid). The NDPs identifies clear links between agricultural transformation and growth of industry; development of infrastructure and urbanisation as a prerequisite to development of high economic growth corridors; and the linkage between skill development and the growth of primary sectors such as tourism, oil and Information and Communication Technology (ibid). This brief survey reveals the practice of reallocating finances to face a change of context is common. However, commitments do not translate in success of a program. The success of a program will depend on the state capacity to efficiently allocate inputs and derive the best outcomes using the least input. To establish the success of the above stated commitment would require us to study and compare the budget mechanism used across the different commitments and programme, which is beyond the scope of this brief survey.

ANNEX 2: A SNAPSHOT OF BUDGET RE-PRIORITISATION IN AFRICA IN THE CONTEXT OF COVID-19

1. **Background**

Indeed, the practice of reallocating finances to face a change of context is common. However, the exceptionally large scale presented by COVID-19 allows us to compare reallocation practices at a new level. Studying reallocations in the context of the pandemic can bring a new light on the use of reallocations as a budget tool.

First, it allows us to study and compare the budget mechanism used across the continent in responding to a sudden, unexpected and large disruptive event which caused a surge in fiscal pressure. Second, comparing trends in reallocation between countries highlights whether common practices can be identified. It can also help to identify broad factors leading to a

specific budget response over another, such as specific institutional frameworks, political agendas or existing budget rigidities. Finally, assessing countries' capacity to respond to sudden change in budget estimates and forecasts can highlight how easily existing PFM systems can accommodate these large budgetary shifts, in terms of decision making, accountability, traceability and reallocation efficiency.

Using available literature, this survey offers an analysis of budget changes recorded in 2020 to better understand the mechanisms, driving forces and impact of the emergency budget revisions that occurred in response to the COVID-19 pandemic. We acknowledge that trends in budget reallocation are dependent on a large number of factors, which include the specificities and quality of the PFM system in place, the political context, variations in revenues, and changes in external financing such as donor aid flows or debt relief. This survey focuses on state budgets and does not integrate movements in off-budget funding, including bilateral and multilateral funding, except when mentioned otherwise. The next section offers a summary of the trends in budget reprioritisation and the quality of budget outcome, after giving an overview of the budget tools available for reallocating funds. The paper then offers some lessons learned.

2. Reprioritisation tools

Most countries faced budget pressure due to increased spending and falling domestic revenue. Historically African countries have had limited fiscal space, and poverty and tax evasion limit the extent of domestic revenue mobilisation (OECD 2019). Therefore, reprioritisation is a common and frequent activity in African context. However, the scope and magnitude of the budget modifications required to respond to the COVID-19 pandemic are unprecedented. Budget revision had to done with speed and with limited information about the needs and consequences of the pandemic (UNODC 2020).

Nevertheless, regulations defining the use of contingency funds, reprioritisations through virements or advance spending differ according to each state's PFM legislation and institutional framework. Different tools exist to allow in-year adjustment under the limits of some predefined rules and were used for short-term response while a new budget was being prepared.

These tools include virements, retroactive funding and transfers. They allow for dealing with uncertainties, unforeseen events, and inaccuracies in the original budget estimates, often without having to go through Parliament's approval. Virements are common in countries with weaker Public Finance Management (PFM) systems. For example, Cabo Verde reallocated to the Ministry of Health USD 676 000, which were previously allocated to the Ministry of Planning (CABRI 2021). Guinea, which voted a supplementary budget law (SBL) for 2020 as late as November, relied on internal movements of funds and advances for most of the year to fund the COVID-19 activities without going through Parliament. Gambia, Lesotho, and Seychelles all reported using virements as a response to financing in the early days of the pandemic (CABRI 2021). Rectification and supplementary budgets were the main instruments of response. Out of 50 countries, 36 produced a supplementary budget in response to the crisis (see Table 2).

Table A 1 List and scale of rectification budgets adopted in response to COVID-19

	Increased Supplementary Budget (Average+10)		Decreased Supplementary Budget (Average-13)		Did not adopt Supplementary Budget
1	Benin	15	Algeria	(13)	Botswana*
2	Central African Republic	15	Angola	(11)	Burundi*
3	Cote d'Ivoire	4	Cabo Verde	(16)	Comoros
4	Djibouti	8	Cameroon	(11)	Egypt*
5	Gambia	13	Congo	(9)	Guinea Bissau
6	Ghana	14	Chad	(6)	Equatorial Guinea
7	Guinea	0.4	DRC	(43)	Libya*
8	Lesotho*	2	Gabon	(7)	Mozambique*
9	Madagascar	4	Kenya*	(4)	Namibia*
10	Malawi*	6	Liberia*	(3)	Rwanda*
11	Mali	9	Sao Tome	(7)	South Sudan*
12	Mauritania	16			Tanzania
13	Mauritius*	24			Zimbabwe
14	Morocco	1			
15	Niger	11			
16	Nigeria	5			
17	Senegal	8			
18	Seychelles	14			
19	Sierra Leone	12			
20	Somalia	44			
21	South Africa*	2			
22	Togo	4			
23	Tunisia	5			
24	Uganda*	14			
25	Zambia	6			

*Countries for which the FY differs from 1 January–31 December

Sources: Collaborative Africa Budget Reform (CABRI) 2020.

Many PFM legal systems include contingency funds and emergency funding accessible under a specific set of circumstances. Some countries resorted to using their contingency fund for the COVID-19 response. Tanzania accessed a contingency reserve of USD3.2 million to finance some health spending. Similarly, in Uganda, the contingency fund allowed for the financing of around one-fifth of the Ministry of Health Preparedness and Response Plan from January to June 2020 (OECD 2020). Seychelles had signed an agreement establishing access to disaster funding, working as a contingency credit available for disasters (ibid).

3. Reprioritisation: Who were the main winners?

Several supplementary budgets registered a reduction in the final budget, reflecting the fall in revenues and leading to extensive cuts and reallocations across programmes and entities. About a third (11) of supplementary budgets registered a downward trend, averaging -13 percent of the initial budgets (Table 1). Algeria, Angola, and Cabo Verde reduced their initial budgets by 13 percent, 11 percent, and 16 percent. The Republic of the Congo made an even more drastic reduction of 43 percent (Table 1).

A majority of countries (25) that passed revised budgets increased their total allocations. Despite the increased revenue constraints and limited fiscal space, many countries nonetheless decided to increase their expenditure estimates. The range of variation was large, with a significant increase in some countries like Somalia, which increased its budget by almost half, and a very minor increase for countries like Guinea or Morocco (Table 1).

The reallocation towards the health sector was the most immediate decision for all countries. To counter COVID-19, the budget was reallocated to facilitate prevention and treatment needs, such as personal protective equipment, testing kits, ventilators, and isolation or quarantine facilities. Health spending as a share of GDP increased in many jurisdictions. In Mozambique, it reached 12.1 percent compared to an average 8.9 percent in the last ten years (UNICEF, 2020).

Countries such as Seychelles, which already had a relatively high level of expenditure on health per capita when compared to the rest of the continent, at US$792 per head in the pre-COVID context, increased the share of recurrent expenditure allocated to health by 0.5 percent to 17.3 percent. At the same time, it decreased for most other budget heads (WHO 2021).

Health reallocation was primarily spent on goods and services, staffing and less often on infrastructure, but mainly prioritizing COVID-19-related activities. Kenya reallocated USD 9.4 million towards the employment of new health workers. A significant share was also allocated to health staff, either for salary supplements or the hiring of extra staff (UNICEF, 2020). By the end of March, Ghana had already allocated USD56 million of its Coronavirus Alleviation Programme to health workers and the pharmaceutical industry. Cabo-Verdean authorities announced a USD 0.8 million emergency plan to cover additional expenses for personnel, training and medical equipment (CABRI 2021; Milken Institute 2020).

The pandemic also ignited increased investments in the Water, Sanitation and Hygiene (WASH) sector. Many countries invested in sanitation facilities in public places like sanitisers and soap, classified as essential goods, in their operational budgets; reduced imports duties (Burkina Faso, Comoros); or distributed it to the population (Mali, Madagascar, Senegal) (ibid).

While governments usually favoured a centralised response, a few countries delegated partly to local administrations. South African municipalities received additional financing to improve WASH and organise food and housing for the homeless. In Uganda, around 13 percent of the supplementary expenditure allocated to the COVID response was allocated to local governments (Parliament of Uganda 2020). These funds were allocated for surveillance, sample collection, and contact tracing (ibid).

Lockdowns and the subsequent reduction in demand have had a significant impact on employment, which forced governments to massively increase budgets for social protection through economic and social package supports. A survey of 21 SSA countries found that individuals and small and medium businesses were the main beneficiaries of the stimulus package provided through budget reprioritisation, before the health and WASH sectors, followed by large businesses and industries (UNODC 2020).

Collectively, socioeconomic support packages provided in the continent as a whole in 2020 were valued at 0.02 percent of GDP in South Sudan to 10.4 percent of GDP for South Africa (Milken Institute, 2020). In April 2020, South Africa and Seychelles reprioritized ZAR40 billion and RS1.1 billion for wage support and salaries guarantee. A significant number of countries supported food security through cash, stamps and in-kind support. Liberia re-appropriated USD25 million to facilitate food distribution (CABRI 2021). Meanwhile, countries such as Togo and Mali provided direct cash transfers for vulnerable households and those who had lost their source of employment. Nigeria, which was already implementing transfers prior to the pandemic to support vulnerable households, extended the coverage to an additional 1 million beneficiaries (ibid).

These were new, one-off measures for most countries, meant to be temporary. Cash transfers can be an important burden for the budget, which few countries

can implement for an extended period. Gambia's, Kenya's and Congo's cash transfers ranged between 41% and 47% of the monthly GDP per capita (Gentilini *et al*. 2020).

The Seychelles government had to cancel a job retention financial scheme earlier than previously announced to limit the widening fiscal deficit (Ministry of Finance 2021).

Budget reprioritisation also happened on the revenue side, with a series of fiscal stimulus packages to ease pressure on businesses. Tax payment cancellation and postponement can reduce liquidity pressure on small and medium businesses, many of which had to close temporarily or saw their activity drastically reduced. By mid-2020, Angola had announced the reduction of the Industrial Tax, Burkina Faso had suspended the Management Learning Tax for transport companies and hotels, and Congo had announced a free extension of penalty payment. VAT and custom duties exemption were also used widely on certain products, like humanitarian aid and food support (Angola, Chad), COVID-19-affected sectors (Senegal, Zambia) and medications (Democratic Republic of the Congo – DRC, Sudan, Tanzania, Tunisia, Zambia) (CABRI, 2021)Some also provided fiscal stimuli in the form of concessional loans and grants, like Senegal and South Africa, which allocated, respectively, 0.5 percent and 0.4 percent of GDP to a loan guarantee scheme (ibid). Nigeria's support through loans and loan guarantees reached up to 7.50 percent of GDP (Gondwe 2020).

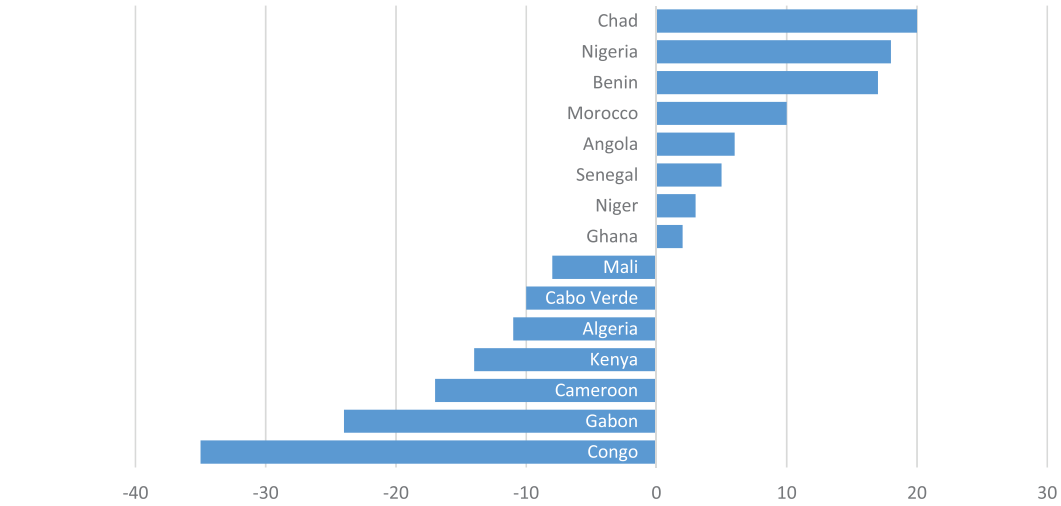
4. Budget cuts: Who were the main losers?

Many countries performed important cuts in their recurrent spending through the goods and services (G&S) appropriation category, particularly on what were considered "non-essential budget items". Obvious budget cuts concerned travel, workshops, sports and entertainment (Ghana, Cabo Verde, Lesotho), which had become temporarily superfluous in lockdown and closing borders (CABRI 2021). In April, Cabo Verde announced cuts in allocations for travel, training, recruitment, office supplies and promotions in the civil service. Seychelles reduced both wages and salaries (W&S) as well as G&S allocations by, respectively, 1.5 percent and 6.3 percent, through cuts in cultural events, entertainment, and travels. A 50 percent reduction was applied to all minor capitals budgets, saving SR27.1 million (USD1.8 million) (Ministry of Finance, 2021). Algeria's supplementary finance bill drastically reduced recurrent spending by 50 percent. Some countries temporarily postponed the final decision, like Angola, which temporarily froze 30 percent of its G&S budget, pending a budget review (ibid).

Wages and salaries were, in some cases, targeted. The nature of the expense makes it difficult to cut drastically, and large civil servant wage bills are often considered a source of rigidity in a country's budget. To minimise the weight of W&S, several governments announced the freezing of new recruitment and promotion in the civil services, as in Tunisia and Cabo Verde, or below inflation salary adjustments like eSwatini. Some countries took it further, like Seychelles, which applied a freeze on recruitment and the scrapping of the 13th-month pay. As the latter is mandatory by law in the private and public sectors, the Attorney General prepared a legislative amendment to allow its temporary suspension, saving the government SR541 million (USD36.6 million), or 5.8 percent of the original budget (Pointe, 2020). In countries like Botswana and Malawi, government officials had to pledge a share of their salaries to be transferred to COVID-19 response funds.

The decision on capital expenditure (CAPEX) was not unanimous, with an overall trend towards reducing capital allocation and many exceptions. Countries under financial pressure often decide to cancel or postpone public investment projects, as they provide easy access to large lump sums (Tandberg & Allen, 2020). The context of the pandemic made these cuts more attractive, as the movement restrictions measures were likely to slow down any public works, at least in the short term.[1] Mali, Carbo Verde, Algeria and Kenya were among the many countries that cut CAPEX in 2020 (Figure 1). Cuts usually targeted specific sectors, as in Lesotho, which reprogrammed the equivalent of 0.35 percent of its GDP from transportation infrastructure CAPEX to the health and social response of COVID-19 (CABRI, 2021). However, other countries increased

Figure A 1 Percentage change to capital expenditure in the 2020 supplementary budget



Source: Various budget laws and supplementary budget laws.

CAPEX allocations, like Chad and Morocco, by 19 percent and 9.5 percent, respectively (Figure 2).

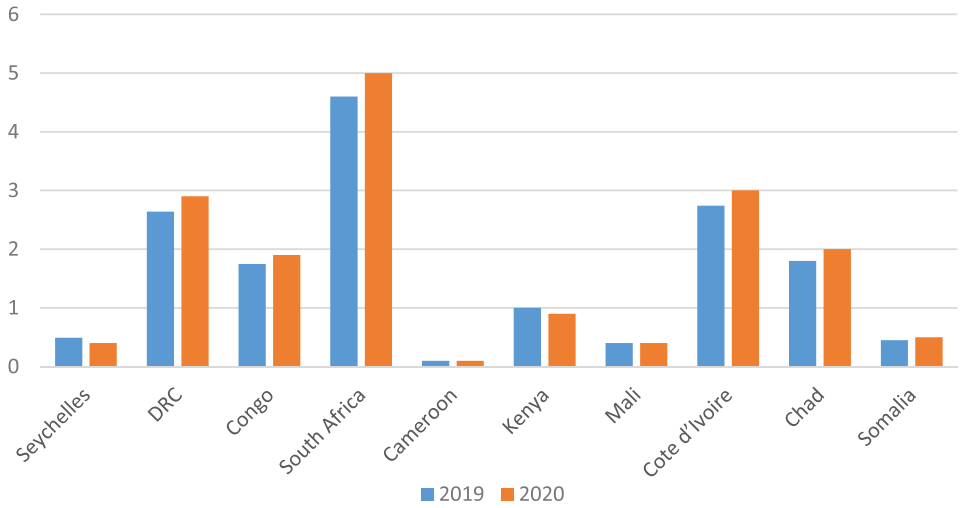
Experts warn that cuts in CAPEX should be well-targeted and done transparently. Projects with a low cost but high economic and social return should preferably be maintained. Countries like eSwatini moved CAPEX allocation from less urgent work towards refurbishing hospitals and completing new hospitals. Experts warn that avoiding operations and maintenance cuts is important to limit long-term impact (Tandberg & Allen, 2020). Some basic rules can help prevent sunk costs, such as limiting CAPEX cuts to projects that were not started yet, as was done in Cabo Verde.

Social and human capital sectors were also often negatively impacted. Reprioritizing funds towards the COVID-19 response has also crowded out spending in other non-health key areas, such as education and nutrition. Education was usually a big loser, particularly in the context of schools closing for several months or functioning under measures of social distancing, which would have led to additional costs to ensure continuous education services (Al-Samarrai, 2020). Countries like Burundi, Zimbabwe and Zambia announced significant decreases in the education budget, with a cut in spending per person estimated at 33%, 23% and 18%, respectively (UNICEF, 2020). This again was not a universal trend, as some countries included additional education spendings in their fiscal stimulus packages, like Equatorial Guinea and Ethiopia (IMF 2020).

Overall, large variations can be observed between countries (Figure 3). Some, like Algeria, ensured that social spending remained untouched. At the same time, Cameroon applied a 20 percent cut to all administrative heads but excluded social administrations (health, education, promotion of women and family, employment and professional training, and advanced education) (Matock 2020). The closing of schools also impacted other social sectors, including health and nutrition, with the interruption of deworming programmes and school feeding programmes. School feeding, which is funded at 30 percent in lower-income countries, and up to 90 percent in low-middle-income countries, might have been directly affected by budget cuts (WFP, 2020).

The reprioritisation to the health response did not usually translate into an increase for other non COVID-related health programmes. Instead, the focus on the COVID-19 response sometimes translated into a neglect of other diseases. Despite the momentum of transferring funding towards health, other programmes have at times been adversely impacted. In Zimbabwe, resources were allocated from HIV/AIDS programmes to COVID-19 preparedness (UNICEF, 2020). Research has also highlighted the impact of budget reallocation on malaria prevention and treatment programmes. Countries highly impacted by malaria, like Côte d'Ivoire, Comoros and Ghana, all deferred their nets and indoor-

Figure A 2 2020 Allocation to the ministry of education as percent of GDP, before and after the 2020 supplementary budget



Source: Various Budget Laws and Supplementary Budget Laws; World Development Indicators

spraying campaigns during the COVID-19 pandemic (Guerra *et al.* 2020).

Quality of delivery: Allocative and Technical Efficiency

Although it is still early to assess the impact on service delivery of the emergency budget reallocations, evaluating the quality of the spending will be vital to learning from the crisis response. The context of increased fiscal pressure enhances the importance of efficient budget spending, including reallocations. The analysis is made more difficult by the lack of data on service delivery, often missing in African budget documents (PEFA, 2020).

The limited progress of PBB reforms, which is a factor when well implemented, can facilitate the evaluation of the quality of spending on specific activities. The context of emergency and poor quality in recording COVID-19- related spending is an additional challenge. **A limited number of countries have released reports on COVID-19-related reallocation and spending.** Large differences between policy announcements and the actual implementation of social protection responses were reported by donors and NGOs (UNICEF 2020). Monitoring progress in the disbursement of funds allocated to specific programmes can inform on the level of implementation, although few countries have monitored and released COVID-19-specific budget execution reports to date. A few governments provided regular updates on the progress against their COVID-19-related spending. Mauritania published regular progress reports on COVID-19 response activities, classified by interventions and with the detail of each measure, such as electricity vouchers, in-kind distribution and cash transfers, and the number of recipients (Ministry of Finance of Mauritania, 2021). Some countries, like Mali, included the tracking of the COVID-19 programme in the regular quarterly in-year reports (Ministère de l'Économie et des Finances du Mali, 2021).

Rates of execution tend to follow previous trends, with some counter-performance on capital spending. The case of Ebola showed that countries tend to maintain past trends in budget execution when dealing with a response crisis. An analysis of the PEFA score in Sierra Leone and Liberia during the Ebola response year showed that although they adjusted their budgets to the new context, in similar ways to what we see now for COVID-19, budget implementation practices followed similar trends as in earlier years. Deviations in specific sectors (overspending or underspending) remained identical after the reprioritisation (Torbert *et al*. 2020). Countries with a history of project execution problems, like Botswana, saw this issue exacerbated by COVID-19 restrictions (RSM Botswana, 2021). Some countries reported spending beyond their initial

COVID-19 allocations, like Mauritania, which could signify initial underbudgeting. Reports on COVID-19 allocation showed that CAPEX funds were generally the most underspent due to project design, contracting, and project monitoring issues.

When data availability allows, conducting a more in-depth resource and expenditure tracking assessment will provide valuable PFM lessons. For example, a case study of Uganda showed that the supplementary budgets allocated to national and regional referral hospitals were allocated under a relatively prescriptive activity-based approach, which limited the flexibility of the response by the health staff and complicated reallocations when those were needed (Margini *et al*. 2020). In Burkina Faso, the government acknowledged that an issue of fragmented health financing arrangements and a lack of coordination between sectoral bodies had been a major challenge in financing the health response in that country, which had one of the highest COVID death rates in Africa in 2020. Limited transfer of funds from the Ministry of Health to health facilities was identified as one of the issues (Think Well Global 2020).

5. Conclusion

In conclusion, the COVID-19 pandemic put unequalled pressure on states' budgets worldwide, but African nations faced the pandemic with extra challenges. They often entered the crisis from a context of limited fiscal space, weaker social protection systems and a history of under-investments in health systems compared to more affluent countries. Ministries of finance had to react immediately to respond to the dual pressure of emergency expenditure and plummeting revenues, which required making radical reprioritisation choices on the existing budget allocations to minimise an inevitable increase in fiscal deficits and debt levels.

Transfers and virements, as well as in some cases contingency funds, provided initial buffers but did not suppress the need for supplementary budgets. A vast majority of countries resorted to passing supplementary budgets, as most PFM laws limit the volume and directions of virements to a particular ceiling, beyond which the changes must be presented to Parliament and/or require revising the budget estimates when significant differences in revenue and expenditure projections occur.

A majority of countries increased their initial budget through an SBL, despite reduced revenues, leading to larger fiscal deficits. The reallocation trends were overall similar across countries, with large re-appropriations of funds towards the health sector, social protection schemes for both individuals and businesses, as well as tax relief for individuals and employers. Most other sectors suffered budget cuts, particularly G&S and minor capital. This applied to social sectors like education, nutrition and non-COVID-related health services. W&S posts were usually protected, with savings nonetheless affected by freezing new recruitments and promotions.

Most countries applied budget cuts to "non-essential services", although the definition of what fell into that category varied. Expenses related to events and travel were the first to be cut in a context of general confinement and social distancing. Reprioritisation of capital investments varied between countries; some governments applying large cuts to redirect to the short-term COVID-19 response, while others reinforced the CAPEX allocations to support employment and much-needed health infrastructure. Reallocations to CAPEX showed a focus on health, WASH and transport. A few countries resorted to applying across-the-board cuts with little prioritisation or planning, with the risk of impacting essential service delivery.

Lessons can be drawn from this experience to reinforce the role of the budget as a tool to respond to unexpected events. This can be done during the initial budget preparation process: 1) by anticipating risks with emergency reserves, flexible contingency funds, and predefined "essential spending"; and 2) if an emergency reallocation needs to occur, by establishing frameworks that allow for transparent decision making and good coordination between agents.

Similar decisions were made during the Ebola crisis, during which Liberia and Sierra Leone announced large decreases in their capital budgets.

ANNEX 3: TABLES FOR THE AGRICULTURE SECTOR

Table A 2 Allocation efficiency of the agricultural sector, %

Groups	2016/17	2017/18	2018/19	2019/20	2020/21
Administration, HRD and Accounting					
Wage	100.0	78.6	67.5	74.0	42.9
Non-Wage	99.8	99.8	99.7	86.2	91.2
Development	96.4	99.9	100.0	90.9	79.9
Agricultural extension co-ordination strengthened					
Wage	-	-	-	-	89.9
Non-Wage	99.9	100.5	100.0	100.0	99.9
Development	-	100.0	100.0	100.0	-
Provision of Agricultural production extension services					
Wage	-	-	-	-	-
Non-Wage	99.7	100.0	100.0	100.0	100.0
Development	100.0	95.0	-	-	-
Transfer to district extension services					
Wage	-	-	-	-	-
Non-Wage	-	100	-	-	-
Development	-	-	-	-	-
Provision of Value Addition extension services					
Wage	-	-	-	-	-
Non-Wage	100.0	100.0	100.0	100.0	100.0
Development	100.0	99.9	100.0	100.0	-
Control of pest and diseases in priority commodities					
Wage	-	-	-	-	-
Non-Wage	100.0	100.0	100.0	100.0	-
Development	100.0	100.0	100.0	88.6	67.0
Crop pest and disease control measures					
Wage	-	-	-	-	-
Non-Wage	99.8	98.8	100.0	100.0	100.0
Development	99.9	99.9	100.0	83.7	98.4
Vector and disease control in priority animal commodities					
Wage	-	-	-	-	-
Non-Wage	100.0	100.0	100.0	100.0	-
Development	98.7	100.0	100.0	98.8	98.7
Vector and disease control measures					
Wage	-	-	-	-	-
Non-Wage	100.0	98.8	100.0	100.0	100.0
Development	99.9	99.9	100.0	99.2	98.3
Fisheries Quality Assurance and standards					
Wage	-	-	-	-	-
Non-Wage	-	-	-	-	-
Development	-	98.7	-	100.0	100.0
Quality Assurance systems along the value chain					
Wage	-	-	-	-	-
Non-Wage	99.9	100.0	100.0	100.0	100.0
Development	98.1	100.0	56.8	97.9	74.1

Groups	2016/17	2017/18	2018/19	2019/20	2020/21
Increased value addition in the sector					
Wage	-	-	-	-	-
Non-Wage	100.0		-	-	-
Development	100.0	100.0	65.1	81.9	60.0
Increased value addition of priority commodities					
Wage	-	-	-	-	-
Non-Wage	99.8	100.0	100.0	100.0	-
Development	98.9	100.0	100.0	89.6	-
Improving Value addition and market Access					
Wage	-	-	-	-	-
Non-Wage	-	-	-	-	-
Development	100.0	99.8	100.0	99.8	88.2
Promotion of Production & Productivity of priority commodities					
Wage	-	-	-	-	-
Non-Wage	98.0	100.0	100.0	100.0	100.0
Development	99.6	99.9	37.0	83.6	71.4
Crop production technology promotion					
Wage	-	-	-	-	-
Non-Wage	-	-	100.0	100.0	100.0
Development	96.7	100.0	95.6	96.1	78.2
Promotion of Animals and Animal Products					
Wage	-	-	-	-	-
Non-Wage	99.7	100.0	100.0	100.0	100.0
Development	100.0	100.0	89.3	96.3	124.8
Promotion of priority animal products and productivity					
Wage	-	-	-	-	-
Non-Wage	100.0	100.1	100.0	100.0	0.0
Development	-	-	160.3	95.9	92.6
Promotion of sustainable fisheries (Directorate of Animal Resources)					
Wage	-	-	-	-	-
Non-Wage	99.9	91.2	-	-	-
Development	100.0	95.0	-	-	-
Promotion of sustainable fisheries (Fisheries Resources)*					
Wage	-	-	-	-	36.2
Non-Wage	-	100.6	100.0	100.0	93.7
Development	-	100.8	94.8	94.6	96.5
Managing distribution of agricultural inputs					
Wage	-	-	-	-	-
Non-Wage	-	-	-	-	-
Development	100.4	100.1	97.6	100.0	99.9
Provision of priority and strategic Agricultural Inputs to farmers					
Wage	-	-	-	-	-
Non-Wage	-	-	-	-	-
Development	100.0	99.7	81.4	99.8	99.9
Support to upper end Agricultural Value Chains and Agribusiness Development					

Groups	2016/17	2017/18	2018/19	2019/20	2020/21
Wage	-	-	-	-	-
Non-Wage	-	-	-	-	-
Development	99.9	101.7	88.4	99.9	99.5
Agricultural research capacity strengthened					
Wage	100.0	100.0	100.0	100.0	100.0
Non-Wage	100.0	100.0	100.0	100.0	100.0
Development	86.2	93.7	100.0	100.0	100.0
Generation of agricultural technologies					
Wage	-	-	-	-	-
Non-Wage	100.0	100.0	100.0	100.0	100.0
Development	86.1	90.0	100.0	100.0	100.0
Generation of technologies for priority commodities					
Wage	-	-	-	-	-
Non-Wage	-	-	-	-	-
Development	90.5	91.9	-	-	-
Research extension interface promoted and strengthened					
Wage	-	-	-	-	-
Non-Wage	100.0	100.0	100.0	100.0	100.0
Development	86.3	92.5	100.0	100.0	100.0
Information Dissemination for Marketing and Production					
Wage					
Non-Wage	-	-	-	40.6	77.2
Development	-	-	-	-	-
Quality Assurance					
Wage	-	-	-	-	-
Non-Wage	-	-	-	50.4	94.6
Development	-	-	-	-	-
Provision of cotton planting seeds					
Wage	-	-	-	-	-
Non-Wage	100.0	100.0	100.0	100.0	100.0
Development	-	-	-	-	-
Provision of pesticides and spray pumps					
Wage	-	-	-	-	-
Non-Wage	-	-	-	100.0	100.0
Development	-	-	-	-	-
Cotton targeted extension services					
Wage	-	-	-	-	-
Non-Wage	-	-	-	100.0	100.0
Development	-	-	-	-	-
Farmer mobilisation and sensitisation for increasing cotton production and quality					
Wage	-	-	-	98.7	99.4
Non-Wage	100.0	100.0	90.3	97.7	99.7
Development	-	-	-	-	-
Seed multiplication					
Wage	-	-	-	-	-
Non-Wage	100.0	100.0	100.0	100.0	100.0
Development	-	-	-	-	-

Table A 3 Allocative efficiency for the disaggregated agriculture development budget

	2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
	Ugx, Mn			Ugx Mn			Ugx, Mn			Ugx, Mn			Ugx, Mn		
	Released	Spent	%	Released	Spent	%	Released	Spent	%	Released	Spent	%	Released	Spent	%
Construction of irrigation schemes															
Domestic	12	12	100.0	500	500	100.0	1,100	1,100	100.0	12,524	12,524	100.0	1,845	1,845	100.0
External	-	-	-	1,109	-	-	13,139	-	0.0	605	605	100.0	37,608	30,807	81.9
% Domestic	100.0	100.0	-	31.1	100.0	-	7.7	100.0		95.4	95.4	-	4.7	5.7	-
Control of pest and diseases in priority commodities															
Domestic	2,137	2,137	100.0	943	943	100.0	569	569	100.0	450	450	100.0	445	445	100.0
External	-	-	-	-	-	-	-	-	-	756	618	81.8	2,422	1,475	60.9
% Domestic	100.0	100.0	-	100.0	100.0	-	100.0	100.0	-	37.3	42.1		15.5	23.2	
Increased value addition in the sector															
Domestic	236	236	100.0	100	100	100.0	-	-	-	-	-	-	100	100	100.0
External	-	-	-	700	700	-	4,143	2,698	65.1	7,782	6,377	81.9	23,952	14,325	59.8
% Domestic	100.0	100.0	-	12.5	12.5	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	
Increased value addition of priority commodities															
Domestic	83	82	98.9	111	111	100.0	111	111	100.0	105	105	100.0	-	-	-
External	-	-	-	1,148	1,148	-	-	-	-	28	15	51.1	-	-	-
% Domestic	100.0	100.0	-	8.8	8.8	-	100.0	100.0	-	78.7	87.8		-	-	-
Purchase of Office and ICT Equipment, including Software															
Domestic	18	10	55.6	163	163	100.0	165	165	100.0	183	182	99.4	145	145	100.0
External	800	800	100.0	2,368	1,868	78.9	2,741	1,581	57.7	4,963	4,535	91.4	41,024	29,994	73.1
% Domestic	2.2	1.2		6.4	8.0		5.7	9.5		3.6	3.9		0.4	0.5	
Quality Assurance systems along the value chain															
Domestic	349	344	98.4	1,755	1,755	100.0	963	963	100.0	1,415	1,414	100.0	1,680	1,670	99.4

	2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
External	8,000	7,850	98.1	1,458	1,458	100.0	42,687	23,834	55.8	10,161	9,917	97.6	6,977	4,746	68.0
% Domestic	4.2	4.2		54.6	54.6		2.2	3.9		12.2	12.5		19.4	26.0	
Strategies, policies, plans and Guidelines															
Domestic	1,576	1,575	99.9	2,006	1,998	99.6	1,209	1,209	100.0	1,137	1,137	100.0	1,150	1,150	100.0
External	-	-	-	4,095	4,095	-	-	-	-	-	-	-	1,298	954	73.5
% Domestic	100.0	100.0	-	32.9	32.8	-	100.0	100.0	-	100.0	100.0	-	47.0	54.7	
Roads, Streets and Highways															
Domestic	-	-	-	-	-	-	-	-	-	-	-	-	100	100	100.0
External	-	-	-	5,700	500	8.8	14,847	3,432	23.1	6,808	5,198	76.3	21,898	20,404	93.2
% Domestic	-	-	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.5	0.5	

Table A 4 Technical Efficiency of the Agriculture Sector

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference
Sector / Vote																	
Agriculture / MAAIF	Administration, HRD and Accounting	No. of positions filled as per the established structure							20	20	0	30	17	-13			
		Ratio of staff equipment and infrastructure against establishment							60	60	0						
		No. of staff trained as per the identified gaps (Needs Assessment)							100	102	2	100	110	10			
		No. of extension officers recruited							938	945	7	365	0	-365			
	Agricultural extension co-ordination strengthened	No. of Agricultural extension service providers accredited							100	77	-23	20	10	-10	30	10	-20
		Ration of extension officers to farmers							500	1,800	1300	500	1800	1300	500	1800	1300
		No. of farmer groups formed							6000	1,011	-4989	6000	6120	120	6000	7926	1926
	Provision of Agricultural production extension services	No. of agro processors of priority/strategic commodities trained							1000	1007	7	1045	1094	49	1050	1075	25
	Transfer to district extension services																
	Provision of Value Addition extension services	No .of farmer groups for priority/strategic commodities trained										30000	31102	1102	30000	32209	2209

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Difference
	Control of pest and diseases in priority com-modities	No. of mobile plant clinics established and operational	No. of districts backstopped on BBW control 63	82								224	225	1	224	231	7
		No. of agro chemi-cals registered	No. of BBW interventions undertaken 63	82								111	134	23	125	139	14
		No. of chemical dealers premises registered										111	244	133	120	209	89
		No. of staff trained in pest surveillance, diagnostics and control										265	363	98			
	Crop pest and disease control measures	No of crop and pest disease control inter-ventions undertaken	100	115	15												
		No of mobile plant clinics established and operational	50	184	134												
		No. of staff trained in pest surveillance, diagnostics and control	120	286	166												
		Number of agro chemicals registered	150	86	-64												
		Number of chemical dealers certified	40	48	8												
		Number of chemical dealers premises registered	50	62	12												
	Vector and dis-ease control in priority animal commodities	No. of Surveillance activities for avian influenza undertaken	24	30	6							2100000	2171000	71000			

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Difference
		Number of Tsetse Surveillance activi-ties undertaken	30	25	-5							220	1261	1041			
		Number of FMD Surveillance activi-ties undertaken	30	30	0												
		No. of animals treat-ed by disease													2000000	2700000	700000
		No. Cattle traders licenses procured and issued													700	1292	592
	Vector and disease control measures	No. doses of FMD, CBPP, rabies and ECF vaccines pro-cured	600,000	1300000	700000												
		No. of districts where surveillance for animal disease has been under taken	50	55	5												
		Number of districts with technical capac-ity to control major epidemic diseases	90	90	0												
	Fisheries Qual-ity Assurance and standards	No. of fishing licenc-es issued.	25000	26704	1704							25000	26704	1704	30000	33085	3085
		No.of boats licensed	11000	11127	127							11000	11127	127	15000	15039	39
		No. of fish value chain actors trained in value addition.													100	123	23

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Difference
	Quality Assur-ance systems along the value chain	No. of District Local Governments Su-pervised, monitored and technical back-stopped on 8 major crop enterprises	60	62	2												
		No. of seed inspec-tions carried out	70	74	4												
		Quantity of seed certified (MT)	16,000	16,200	200												
		Number of farmers trained on post-har-vest handling tech-nologies (crops)							500	566	66						
		Number of firms/ individuals licensed to export agricultural products							200	70	-130	200	221	21	100	172	72
	Increased value addition in the sector	N/A															
	Increased value addition of priority com-modities	NA								1080	1080						
		Number of farmers trained in value addition							1000		-1000						
	Improving Value addition and market Access	N/A															

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Difference
	Promotion of Production & Productivity of priority com-modities	‡Percentage change in animal disease and vector outbreaks							16%	14.20%	-1.8						
		Percentage change in number of animals produced for market							7%	12.70%	5.7						
		Percentage change in rejection of animal and animal products due to poor quality and safety							15%	7.00%	-8%						
	Crop production technology promotion	No. of farmer field schools formed	20	35	15					12	12						
		No. of technologies promoted	12	15	3				12	45	33				15	16	1
		No. of tractor types tested for perfor-mance	4	3	-1												
		No. of Water user committees formed and trained	45	46	1												
		Number of farmer demonstration sites by commodity							36		-36				265	325	60
																	0
	Promotion of Animals and Animal Products	No. of livestock farmers trained in livestock oriented production							1000	1157	157	2000	2112	112	2500	2890	390

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference
		No. of animal and animal product importers and exporters registered							200	178	-22	10	32	22	60	73	13
		Number of bee keepers trained	480		-480												
				660	660												
	Promotion of priority animal products and productivity	No. of animal feed lot demonstrations and zero grazing units undertaken							200	213	13	15	21	6			
		No. of farmers trained on post-harvest handling technologies							1500	1585	85	300	345	45			
	Promotion of sustainable fisheries (Directorate of Animal Resources)	No. of aquaculture enterprises supported	300	362	62												
		Number of boats licensed	4,000	2,800	-1200												
		Number of fisheries surveillance/enforcement activities undertaken	350	690	340												
		Number of aquaculture park constructed	6	-	-6												
		Number of aquaculture park designs completed	20	-	-20												
		Number of aquaculture park sites identified	50	4	-46												

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Difference
		Number of fishers trained in post harvest handling	600	700	100												
	Promotion of sustainable fisheries (Fisheries Resources)*	No. of aquaculture parks identified, designed and constructed							2	0	-2				2	2	0
		No. of fish fingerings distributed to farmers							1500000	1,418,500	-81500				1500000	1500000	0
		No. of farmers receiving fish seed							300	289	-11				300	300	0
Agriculture/ NAADS	Managing distribution of agricultural inputs	No. of field verification and inspection exercises conducted							8	8	0	8	8	0	8	10	2
		No. of field supervisory exercises conducted							6	6	0	6	6	0	6	8	2
	Provision of priority and strategic Agricultural Inputs to farmers	No. of poultry units established							955	616	-339						
		No. of farming households supplied with agricultural inputs							2004500	1,472,146	-532354	515150	563098	47948	530848	2012961	1482113
		Quantity of inputs distributed by enterprise							99,179,500	36,799,765	-62379735	27329431	43478325	16148894	47286408	51913380	4626972

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference
	Support to upper end Agricultural Value Chains and Agribusiness Development	No. of farmer groups supported with value addition equipments							60	61	1	32	32	0			
		No. of farmer groups supported in management of value addition equipment							60	61	1	32	40	8			
		No. of Commodity Platforms supported in Agribusiness Development Services							3	4	1	1	1	0			
		No. of value chain studies conducted for selected priority and strategic commodities							1	-	-1	1	1	0			
Agriculture/ NARO	Agricultural research capacity strengthened	No. of farmer groups supported with value addition equipments													9	116	107
		No. of farmer groups supported in management of value addition equipment													9	6	-3
		No. of value chain studies conducted for selected priority and strategic commodities													8	8	0
	Generation of agricultural technologies	No. of improved productivity technologies generated	35	64	29												

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Difference
		No. of new varieties submitted to Variety Release Committee for release	15	30	15												
		No. of research studies under competitive grants scheme	41	41	0												
	Generation of technologies for priority commodities																
	Research extension interface promoted and strengthened	No. of technological innovation platforms established/supported	7	8	1												
		No. of technological innovations delivered to uptake pathways	5	15	10												
Agriculture/ UCDA	Information Dissemination for Marketing and Production																

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference	Target	Achieved	Difference
	Quality Assurance	No. of Fairly Average Quality (FAQ) samples (clean coffee) analyzed							17000	2266	-14734	620	827	207	700	1982	1282
		No. of coffee bags certified for export (million 60-kg bags)							4.6	4	-0.402488	5.1	5.103	0.003	4.7	6.05	1.35
		No. of Quality Certificates issued							21500	12,956	-8544	16000	15249	-751	19000	18487	-513
Agriculture/ UCDO	Provision of cotton planting seeds	No. of districts served with cotton planting seed							66	65	-1	67	67	0	69	70	1
	Provision of pesticides and spray pumps	No. of districts served with pesticides and pumps							66	65	-1	67	67	0	69	70	1
	Cotton targeted extension services	No. Extension workers trained							400	392	-8	400	450	50	450	454	4
	Farmer mobilisation and sensitisation for increasing cotton production and quality	No. demonstration plots established for farmer training				3800	3965	165	4000	4182	182	4000	4000	0	4500	4593	93

			2016/2017			2017/2018			2018/2019			2019/2020			2020/2021		
		Outcome indicator	Target	Achieved	Difference	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Differ-ence	Target	Achieved	Difference
		No. of farmers trained during the training sessions conducted at the demostration plots				100000	108,000	8000	108000	113,814	5814	108000	123000	15000	135000	113200	-21800
		No. of training sessions conducted at the demostration plots				11400	11,950	550	12000	12,646	646	12000	12646	646	13500	13866	366
	Seed multipli-cation	No. of seed growers registered and trained on seed production				6000	6000	0	6000	5200	-800	6500	7000	500	6500	6630	130

Vote	Output	Consolidation
MAAIF	Acquisition of Land by Government	General Administration
MAAIF	Acquisition of Other Capital Assets	General Administration
MAAIF	Administration, HRD and Accounting	General Administration
MAAIF	Administration, HRD, and Accounting	General Administration
MAAIF	Arrears	General Administration
MAAIF	Creating and Enabling environment for Agriculture	General Administration
MAAIF	Government Buildings and Administrative Infrastructure	General Administration
MAAIF	Human Resource Management Services	General Administration
MAAIF	Institutional Development In Agricultural Sector	General Administration
MAAIF	Policies, laws, guidelines, plans and strategies	General Administration
MAAIF	Purchase of Motor Vehicles and Other Transport Equipment	General Administration
MAAIF	Purchase of Office and ICT Equipment, including Software	General Administration
MAAIF	Purchase of Office and Residential Furniture and Fittings	General Administration
MAAIF	Records Management Services	General Administration
MAAIF	Roads, Streets and Highways	General Administration
MAAIF	Secondment for MAAIF staff in Rome	General Administration
MAAIF	Strategies, policies, plans and Guidelines	General Administration
MAAIF	Strategies, Policies, Plans and guidelines	General Administration
MAAIF	Support for Agricultural Training Institutions	General Administration
MAAIF	Transfer to district extension services	General Administration
DDA	Acquisition of Other Capital Assets	General Administration
DDA	Government Buildings and Administrative Infrastructure	General Administration
DDA	Human Resource Management Services	General Administration
DDA	Purchase of Motor Vehicles and Other Transport Equipment	General Administration
DDA	Purchase of Office and ICT Equipment, including Software	General Administration
DDA	Purchase of Office and Residential Furniture and Fittings	General Administration

Vote	Output	Consolidation
NAGRIC	Establishment & maintenance of inter agencey and public private partnership (PPP) linkages	General Administration
NAGRIC	Financial management,management accounting & financial Accounting.	General Administration
NAGRIC	Human Resource management &development.	General Administration
NAGRIC	Maintenance & development of NAGRC&DB as the focal point of the global plan of action for management of Animal genetic resources.	General Administration
NAGRIC	Promotion and development of regional & international relations.	General Administration
NAGRIC	Acquisition of Other Capital Assets	General Administration
NAGRIC	Arrears	General Administration
NAGRIC	Government Buildings and Administrative Infrastructure	General Administration
NAGRIC	Purchase of Motor Vehicles and Other Transport Equipment	General Administration
NAGRIC	Purchase of Office and Residential Furniture and Fittings	General Administration
NAGRIC	Roads, Streets and Highways	General Administration
NARO	Arrears	General Administration
NARO	Internal Audit	General Administration
NARO	Payments to International Organisations (CGIAR, ASARECA, WARDA)	General Administration
NARO	Purchase of Motor Vehicles and Other Transport Equipment	General Administration
NARO	Purchase of Office and ICT Equipment, including Software	General Administration
NARO	Purchase of Office and Residential Furniture and Fittings	General Administration
NAADS	Arrears	General Administration
NAADS	Programme management and coordination	General Administration
NAADS	Purchase of Motor Vehicles and Other Transport Equipment	General Administration
NAADS	Purchase of Office and ICT Equipment, including Software	General Administration
NAADS	Purchase of Office and Residential Furniture and Fittings	General Administration
CDO	Arrears	General Administration

Vote	Output	Consolidation
CDO	Government Buildings and Administrative Infrastructure	General Administration
CDO	Purchase of Motor Vehicle and Other Transport Equipment	General Administration
UCDA	Arrears	General Administration
UCDA	Contributions to International Organizations	General Administration
UCDA	Establishment Costs	General Administration
UCDA	Government Buildings and Administrative Infrastruture	General Administration
UCDA	Purchase of Motor Vehicles and Other Transport Equipment	General Administration
UCDA	Purchase of Office and ICT Equipment, including software	General Administration
UCDA	Purchase of Office and Residential Furniture and Fittings	General Administration
NARO	Government Buildings and Administrative Infrastructure	General Administration
MAAIF	Construction of irrigation schemes	Agriculture Infrastructure
MAAIF	Construction of Irrigation Schemes	Agriculture Infrastructure
MAAIF	Fisheries Infrastructure Construction	Agriculture Infrastructure
MAAIF	Food and nutrition security	Agriculture Infrastructure
MAAIF	Improved access to water for livestock	Agriculture Infrastructure
MAAIF	Improved market access for livestock and livestock products	Agriculture Infrastructure
MAAIF	Livestock Infrastructure Construction	Agriculture Infrastructure
MAAIF	Livestock marketing facility construction	Agriculture Infrastructure
MAAIF	National Farmers Leadership Centre	Agriculture Infrastructure
MAAIF	Plant clinic/laboratory facility construction	Agriculture Infrastructure
MAAIF	Valley Tank Construction (livestock)	Agriculture Infrastructure
CDO	Mechanisation of land opening	Agriculture Infrastructure
MAAIF	Control of pest and diseases in priority commodities	Pest and Diseases
MAAIF	Control of Tryptanomiasis and Sleeping Sickness (COCTU)	Pest and Diseases
MAAIF	Crop pest and disease control measures	Pest and Diseases
MAAIF	Vector and disease control in priority animal commodities	Pest and Diseases
MAAIF	Vector and disease control measures	Pest and Diseases
MAAIF	Improving Value addition and market Access	Value Addition
MAAIF	Increased value addition in the sector	Value Addition
MAAIF	Increased value addition of priority commodities	Value Addition
UCDA	Value Addition and Generic Promotion	Value Addition
MAAIF	Promotion of Animals and Animal Products	Production and Productivity
MAAIF	Promotion of priority animal products and productivity	Production and Productivity
MAAIF	Promotion of Production & Productivity of priority commodities	Production and Productivity
MAAIF	Promotion of sustainable fisheries	Production and Productivity
DDA	Promotion of dairy production and marketing	Production and Productivity
DDA	Support to dairy development	Production and Productivity
NAADS	Managing distribution of agricultural inputs	Production and Productivity
NAADS	Operation Wealth Creation	Production and Productivity
NAADS	Provision of priority and strategic Agricultural Inputs to farmers	Production and Productivity
CDO	Provision of cotton planting seeds	Production and Productivity
CDO	Provision of pesticides and spray pumps	Production and Productivity
CDO	Seed multiplication	Production and Productivity
KCCA	Market Access for Urban Agriculture	Special Entity
KCCA	Urban Market Construction	Special Entity
KCCA	Urban Market Rehabilitation	Special Entity
KCCA	Vendor regulation and dispute settlements	Special Entity
MAAIF	Crop production technology promotion	Research and Technology
MAAIF	Purchase of Specialised Machinery & Equipment	Research and Technology
DDA	Purchase of Specialised Machinery & Equipment	Research and Technology
NAGRIC	Breeding &multiplication of meat goats	Research and Technology

Vote	Output	Consolidation
NAGRIC	Breeding &multiplication of pigs	Research and Technology
NAGRIC	Production and sale of founder brood stock of fisheries resources.	Research and Technology
NAGRIC	Promotion of beef cattle breeding	Research and Technology
NAGRIC	Promotion of the identified, established and economically viable fish breeds.	Research and Technology
NAGRIC	Industrial production of animal feeds.	Research and Technology
NAGRIC	Multiplication of pure beef breeds & appropriate crosses	Research and Technology
NAGRIC	Multiplication of pure Dairy animals & appropriate crosses	Research and Technology
NAGRIC	Promotion of dairy cattle breeding	Research and Technology
NAGRIC	Beef breeding, promotion of beef breeds associations and beef breeder societies.	Research and Technology
NAGRIC	Conservation and utilization of indegnous Animal Genetic resources.	Research and Technology
NAGRIC	Develop and maintain collaborative linkages for the establishment and development of a National Animal identification system	Research and Technology
NAGRIC	Develop National herd/milk/ beef recording schemes	Research and Technology
NAGRIC	Development and maintenace of a National Livestock Registry and National Data Bank	Research and Technology
NAGRIC	Evaluation and multiplication of improved pasture and fodder germ-plasm	Research and Technology
NAGRIC	Industrial production of milk and allied products	Research and Technology
NAGRIC	Production and distribution of chicks	Research and Technology
NAGRIC	Production, procurement and sale of liquid nitrogen and associated equipment.	Research and Technology
NAGRIC	Production, procurement and sale of semen, eggs, ova, embryos and their associated equipment	Research and Technology
NAGRIC	Promotion of the identified, established and economically viable poultry genetic resources	Research and Technology
NAGRIC	Purchase of Specialised Machinery & Equipment	Research and Technology

Vote	Output	Consolidation
NAGRIC	Select,improve and conserve indegnous poultry genetic resources.	Research and Technology
NAGRIC	Strengthening and maintenace of dairy & beef bull, billy & boar studs.	Research and Technology
NAGRIC	Strengthening and maintenace of state-of- the-art ARTs laboratories	Research and Technology
NARO	Agricultural research capacity strengthened	Research and Technology
NARO	Generation of agricultural technologies	Research and Technology
NARO	Generation of technologies for priority commodities	Research and Technology
NARO	Purchase of Specialised Machinery & Equipment	Research and Technology
NAADS	Purchase of Specialised Machinery & Equipment	Research and Technology
CDO	Purchase of Specialised Machinery & Equipment	Research and Technology
UCDA	Production, Research & Coordination	Research and Technology
MAAIF	Fisheries Quality Assurance and standards	Quality Assurance
MAAIF	Monitoring & Evaluation of commodity approach activities in the sector	Quality Assurance
MAAIF	Monitoring and evaluating the activities of the sector	Quality Assurance
MAAIF	Quality Assurance systems along the value chain	Quality Assurance
DDA	Quality assurance and regulation along the value chain	Quality Assurance
NAGRIC	Performance & progeny-testing schemes	Quality Assurance
NAGRIC	Monitoring and evaluation	Quality Assurance
NAADS	Planning, Monitoring and Evaluation	Quality Assurance
NAADS	Strategic interventions supported	Quality Assurance
UCDA	Quality Assurance	Quality Assurance
MAAIF	Provision of Agricultural production extension services	Extension
MAAIF	Provision of Value Addition extension services	Extension
NAGRIC	Training of fish farmers and breeders	Extension
NAGRIC	Training of poultry breeders & farmers	Extension
NAGRIC	Training, refreshing and facilitating AI and MOET technicians	Extension

Vote	Output	Consolidation
NAGRIC	Providing breeding-training to farmers and other stakeholders along the ARTs value chain	Extension
NAGRIC	Dairy breeding, promotion of Dairy breeds associations and Dairy breeder societies	Extension
NARO	Research extension interface promoted and strengthened	Extension
NAADS	Agribusiness Development Supported	Extension
NAADS	Agri-Led Strategic Interventions	Extension

Vote	Output	Consolidation
NAADS	Support to upper end Agricultural Value Chains and Agribusiness Development	Extension
CDO	Cotton targeted extension services	Extension
CDO	Farmer mobilisation and sensitisation for increasing cotton production and quality	Extension
UCDA	Information Dissemination for Marketing and Production	Extension

Table A6 Transformative Outputs to Consider

VOTE	Output
MAAIF	Construction of irrigation schemes
MAAIF	Construction of Irrigation Schemes
MAAIF	Fisheries Infrastructure Construction
MAAIF	Food and nutrition security
MAAIF	Improved access to water for livestock
MAAIF	Improved market access for livestock and livestock products
MAAIF	Livestock Infrastructure Construction
MAAIF	Livestock marketing facility construction
MAAIF	National Farmers Leadership Centre
MAAIF	Plant clinic/laboratory facility construction
MAAIF	Valley Tank Construction (livestock)
CDO	Mechanisation of land opening
MAAIF	Vector and disease control in priority animal commodities
MAAIF	Vector and disease control measures
MAAIF	Increased value addition of priority commodities
UCDA	Value Addition and Generic Promotion
MAAIF	Promotion of Animals and Animal Products
MAAIF	Promotion of priority animal products and productivity
MAAIF	Promotion of Production & Productivity of priority commodities
MAAIF	Promotion of sustainable fisheries
DDA	Promotion of dairy production and marketing
DDA	Support to dairy development
NAADS	Managing distribution of agricultural inputs
NAADS	Operation Wealth Creation
NAADS	Provision of priority and strategic Agricultural Inputs to farmers
CDO	Provision of cotton planting seeds
CDO	Provision of pesticides and spray pumps
CDO	Seed multiplication
MAAIF	Fisheries Quality Assurance and standards

VOTE	Output
MAAIF	Quality Assurance systems along the value chain
DDA	Quality assurance and regulation along the value chain
UCDA	Quality Assurance
MAAIF	Provision of Agricultural production extension services
MAAIF	Provision of Value Addition extension services
NAGRIC	Training of fish farmers and breeders
NAGRIC	Training of poultry breeders & farmers
NAGRIC	Training, refreshing and facilitating AI and MOET technicians
NAGRIC	Providing breeding-training to farmers and other stakeholders along the ARTs value chain
NAGRIC	Dairy breeding, promotion of Dairy breeds associations and Dairy breeder societies
NARO	Research extension interface promoted and strengthened
NAADS	Agribusiness Development Supported
NAADS	Agri-Led Strategic Interventions
NAADS	Support to upper end Agricultural Value Chains and Agribusiness Development
CDO	Cotton targeted extension services
CDO	Farmer mobilisation and sensitisation for increasing cotton production and quality
UCDA	Information Dissemination for Marketing and Production

Economic Policy Research Centre
Plot 51, Pool Road, Makerere University Campus
P.O. Box 7841, Kampala, Uganda
Tel: +256-414-541023/4, Fax: +256-414-541022
Email: eprc@eprc.or.ug, Web: www.eprc.or.ug